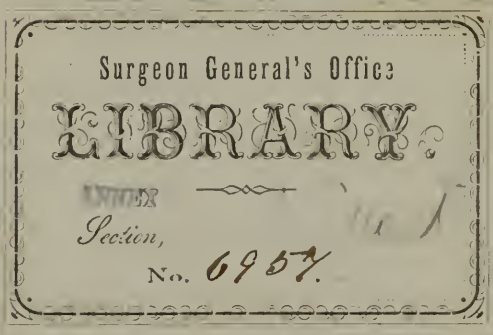


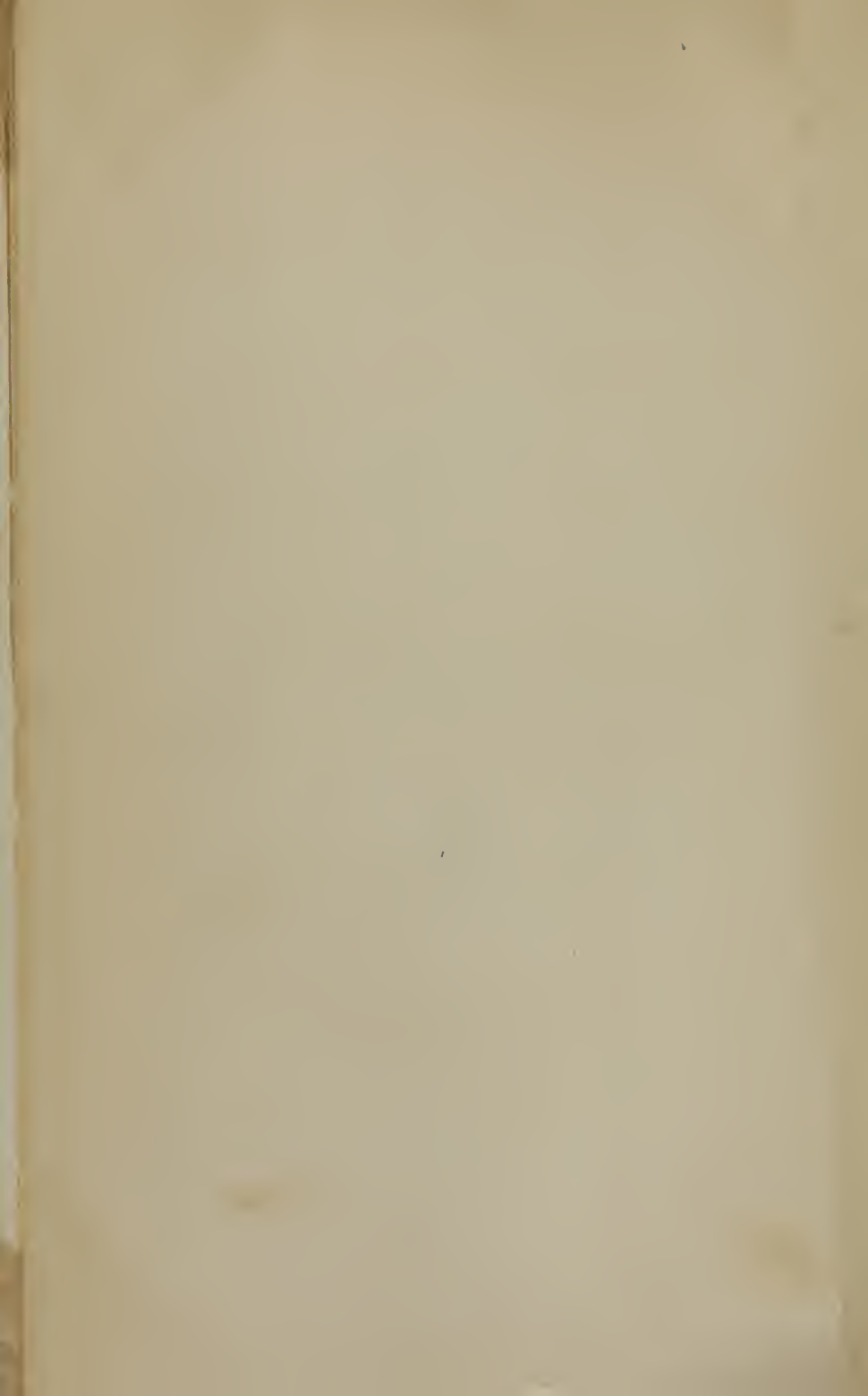
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VIEWS
OF THE
NEW THEORY OF DISEASE
AND OF
Treatment and Cure,
BASED UPON THE
NUTRITIVE PRINCIPLE:
ILLUSTRATIVE OF THE
SCIENCE OF FLUID PHYSIOLOGY
AND THE
CHEMICAL PROPERTIES OF THE BLOOD.

✓
BY ALFRED G. HALL, M.D.
PROFESSOR OF PHYSIOLOGY.

FOR THE PEOPLE.

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IN FOUR PARTS.
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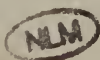
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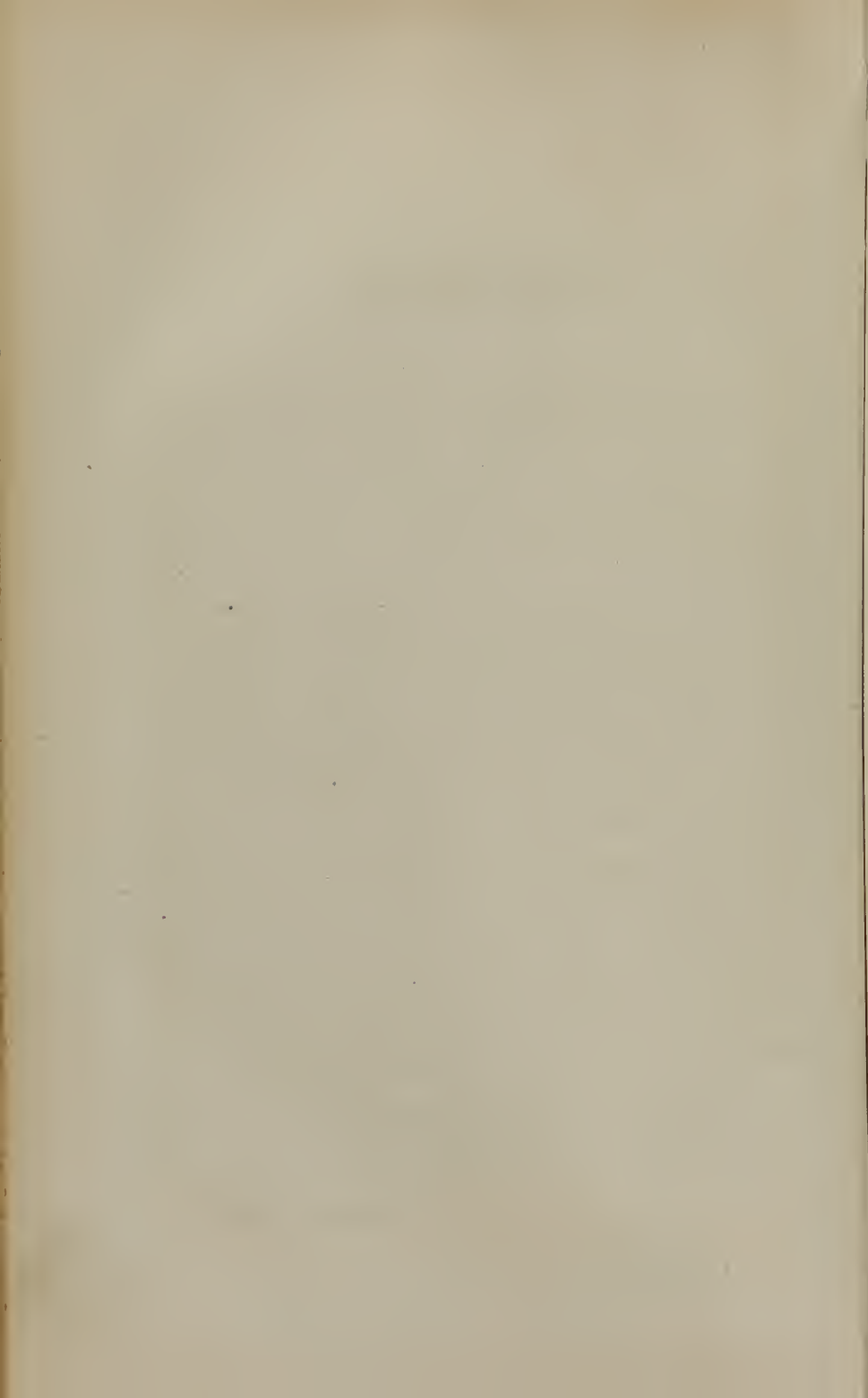


To the Reader.

THE author has been repeatedly requested to give a synopsis of his views in relation to the Nutritive Principle, and his New Theory of Disease. In assuming the position of a writer he feels himself impelled to apologize for the manner in which the substance of the work is presented to a discerning public, from the fact that its composition has occupied the labor of but a few weeks. Notwithstanding, as the reader will discover, its contents must have involved the research of years, for the positions taken are those only which are actually sustained by facts in Chemistry and Physiology. The author is painfully sensible of a want of style and arrangement throughout the treatise, it having been hastily prepared under the pressure of other business at the seat of Government. Having been much engaged as a lecturer, like all other public speakers his style is not adapted to a scientific dissertation; in his apology to the intelligent reader, candor requires an acknowledgment of the fact, that this has been comparatively intentional. He has written a pamphlet for the people—he has purposely avoided technicalities, in order that he might address himself intelligently to that most numerous, and to the philanthropist most interesting, class of community—the common people—to whom we must always appeal for the support of every sound principle of reform.

ALFRED G. HALL.

WASHINGTON CITY, }
April, 1852. }



PART FIRST.

THE NUTRITIVE PRINCIPLE.

Introduction—Vegetable and Animal Organization and Decay—The Nutritive Principle a Universal Law—The Province of Physiological and Chemical Law—Circulating Mediums Explained—Fluid Physiology—The relative action of the two laws illustrated—Laws of Organization and of Decay—Temperature of the Fluids of the Body—The Action in Waste and Replenishment—All Disease exists under Chemical Law—The Nutritive Principle under Physiological Law maintains all the Forces of the Body, and resists Disease and Decay—Vital Forces derived alone from the Fluids of the Circulating Mediums—Use of Nutritive Fluids as Restoratives, increasing the Weight, Strength and Vigor of the Body under Disease, by Natural Deposits of Vital Elements applicable to all Diseases.

IN every age of the world, and in every clime, the mind of man has been destined to contemplation and research. His discerning spirit has been called to survey the works of Nature mantled in life, beauty and loveliness, in all her departments: in the rich and magnificent scenery spread out before him in the vast creation; in the changes of the seasons, as they constantly transpire; in the various developments of animation and verdure—of languor and repose—at once exhibiting the grandeur of their fullness, the expanding splendor of their perfection, as well as that wide-spread desolation that unfolds their decay, and lays them, with one general devastation, in the silence of the dust. There can be nothing more beautifully emblematical of our existence. The blooming sweetness of innocence and infancy—the wild and harmless developments of childhood and youth—the beauty and sternness of opening manhood, as he conflicts with dignity, and swells the tide of noble and generous ambition, to unfold his vigorous prime—to deplore alike around each the blasting mildews of premature decay—the withering influences of disease pointing to the spirit's home. But the searching spirit of scientific investigation has at once scanned the principles of animal and vegetable life, and those wasting and decomposing influences that return them to the arms of death and repose. It has measured their

unfolding bloom, their progressive beauty and majestic grandeur, their triumph of symmetry and perfection of feature—it has noticed, too, with sterling interest, when that beauty fades, when that grandeur withers in the chilling frosts, when that symmetry and perfection expire, as though they had not been; reclining on the very earth on which their beauty and fragrance were unfolded, in silence and in death.

In the school of nature, true to herself, with her thousand illustrations constantly transpiring in her wide-spread domain, she is beautifully represented in mysterious connection with the stern cold earth, at once her birth-place, her bridal-ground, and her grave. When she draws from its bosom the fragrance of the rose, the mild perfume of the lily and the jessamine, the odor of the violet, the sweet-scented geranium, with her thousand perfumes to embalm the air, diffusing new odors from the forest and from the field; the blossoms of a thousand trees; the development of their fruits; the plants and grains; their rich flowers and golden harvests, in great and endless variety, are all adapted, by a kind Providence, to the gratification, comfort, and sustenance of man; these are living witnesses, whose testimony have been a constant source of instruction to the rising generations, as they have appeared and expired upon the vast ocean of time.

In every progressive age of the world the sciences of Botany, and of Vegetable Physiology, have been gradually unfolded to intelligent minds of almost every country. Mind after mind has carefully investigated the subject, the one constantly gathering new strength from the researches of the other, until a mass of evidence has accumulated sufficient alike to demonstrate the properties of vegetable matter as the truthfulness of science. Chemistry alone, in her deep and profound investigations of organic structures, both from the vegetable and animal kingdom, has been pouring her increasing light upon every field of science in which the natural laws are involved, in the production of organisms, whether they exist in the vegetable or animal kingdom; the great results of which researches have been, actually to ascertain the properties of composts and soils; to define their virtues; to trace them through the physiological

laws of vegetable organization, vital growth and development; to reduce them at once to inorganic matter, where the properties of their organisms can only be truly ascertained, from the fact of discovering in their lifeless remains that which the laws of chemistry alone can define; having actually existed in the very earth from which they emanated, as in the organic vitality and substance with which they were endowed.

It will be plainly inferred that science has triumphed as fully in the vegetable as in the animal kingdom, in her discoveries, while the sciences of Anatomy and Physiology, connected as they ever have been with the investigation of structures, have amply proven that animal or human organisms are alike ascertained to contain the properties of vegetable organization; consequently, vegetable substances, taken and received by the body as food and nutriment, under the physiological laws, become the source from which the animal organism derives its progressive growth and formation. It is found also to contain, when reduced and analyzed by chemical laws, in its lifeless remains, the same properties of matter as that which is contained in the primitive vegetable formation.

It is very evident that the soil itself contains the material and properties from which all vegetable matter is produced, in the form of plants and seeds, roots and fruit, intended for the use of man; that it sustains and supports, forms and builds up, vegetable organisms by the circulation of *fluids* through their *vessels*, adapted to the transmission of substance for their growth and development.

Here a nutritive principle existing in nature claims a process of deposit of substance, in the structure and growth of every living organized vegetable body. This principle claims from the soil *such* nutritive elements and substance as invigorate and vitalize all vegetable matter. In the order of natural development, the fluids, absorbed or taken up by the tree or plant from the earth, become the medium throughout their vessels of the deposit of substance for the growth and full development of all its parts, the perfection of its blossoms, its seeds, and its fruit.

The whole of this process, in the formation of organisms,

depends absolutely upon the nutritive principle for the application of such material as the soil may furnish for their structure. Should this be withheld, the physiological laws which virtually depend on nutrition would cease also to exercise their powers of organization, a new process would commence, and the dissolution of the organism by chemical laws would be the result.

We wish the reader to understand distinctly, that when we refer to physiology and its laws, controlling the existence, growth, and development of animal and human organisms alike in their process, formation, and plenitude, we convey the idea of organization carried on and sustained by the existence of nutritive fluids, deposited from fluid circulating mediums—distributing substance and combustion to the several component parts of the organs and organism; also, that physiological law forms and constructs organisms, by the application and adaptation of nutriment contained in the food furnished the body in substance and fluids, requisite to sustain organic vitality, by the arrangement of their several properties and qualities in such a manner as to develop the perfection of all its parts, and to sustain an organic living structure, to supply its continuous waste and evaporation of substance at each moment of time, so as fully to maintain its progressive existence.

In the next place, we call the attention of the reader to a very important explanation, which we consider, under all circumstances, necessary in this place, to prevent the mind from becoming confused, in surveying that important connection that our subject claims, as we progress in the illustration of our views. We propose specifically to explain the meaning and import of the idea contained in the words *circulating mediums*, as they are used throughout this pamphlet. The fluid physiology and nutritive principle, that we claim constitutes the organization of the body and all its relative parts, exists in those mediums. One class of tubular structure commences at the left chamber of the heart, which is called the *ventricle*: the blood is from thence propelled by the action of that organ, in continuous tubes of elastic fibrous substance, to every significant and minute portion of the whole structure, terminating

in the finer and minuter tissues of blood-vessels, everywhere in the organs and organisms. Through these *distributing* vessels the circulating mediums become the channels through which the food and nutriment for the body, in a fluid form, when perfectly digested, is carried to and deposited at their several points of destination throughout the whole structure and its laboratories; supporting every part, as it exhausts, with nutritive elements, by depositing substance and combustion, matter and caloric, in an organic vital form. This work is all carried on by the circulating mediums.

Another class of circulating mediums is that which commences all over the complicated structure of the organs and organism, in very minute and delicate tubular structure, urging the fluids within them from the surfaces of the organs and organism from every part of the system, to the right chamber of the heart, which is called the auricle. The blood-vessels in this tubular structure increase gradually in size; and, in thus increasing, connect with each other, until the blood is introduced into the heart in one tubular stream. These are called the *returning* vessels or mediums. This circulating medium passes from the surfaces and extremities everywhere to the heart, collecting and returning, from a multitude of branches, the latent carbonized fluids; while the one above noticed commences at the heart, and extends, dividing off until it reaches all the surfaces and the extremities, and the organs and organism, and is interwoven in distinct tissues of fine tubular structure with the returning circulation; so that the blood, after depositing its new fibre, and vitalizing the new-born substance, at and in every part, is taken up by this circulating medium, and returned to the heart. This continuous round of waste and deposit, of exhaustion and nutrition, is constantly, at every moment of time, transpiring, changing, and moving, in particles and atoms according to the nutritive principle.

We consider this explanation sufficient for our present purpose, so far as these two classes of circulating mediums are involved, but the heart has four chambers, two to receive, and two to discharge fluids. Hence, there is another class of circulating mediums proceeding from, and returning to

the heart, acting comparatively in a similar manner as the two circulating mediums above noticed, whose field the lungs alone. The distributing medium arising from the right chamber of the heart, which is called the ventricle, propels the blood, with her nutritive elements, to receive from every air cell in the lungs the oxygen of the atmosphere; it is also interwoven, in very minute tubular structure, around, and to the cells, for that purpose. Immediately in the vicinity of the air cells another very minute tubular structure of blood-vessels arise, interwoven with the former, acting as returning mediums to the left chamber of the heart, which is called the auricle. It may be here stated, that the combustion, or animal heat, for the circulating mediums, is derived from the oxygen and carbon—the nutritive elements of the blood—from their union in the lungs at the points of their contact, and connection around the air cells.

We have yet another class of circulating mediums proceeding from the brain, as their centre, through the spine, and all the distributing nervous channels that permeate all parts of the living structure, into the minute, fine, tissular structure of the nerves; and, again, from all these minute, fine, tissular structure, at all their extremities, in every part of the complicated machinery, and its organs, a returning circulating medium is kept up in communication again with the brain.

The next idea we wish to present is, the sense in which we use the term “chemistry, or chemical laws.” As we progress in the illustration of our views, connected as they are with our theory, we mean to convey the idea that it is not the province of chemistry, or chemical laws, to arrange or organize, or to form or construct, animal bodies; but that it becomes the province of chemistry, and chemical laws, to change the properties of fluids—to derange and alter their qualities—to separate their constituent parts from each other—to decompose and dissolve matter—to disorganize any organic living structure—to analyze, define and test the properties of all simple and compound material or organic bodies—to ascertain the affinity that one inorganic substance has to another—to define how the property of one class of material matter, fluid, or gas, acts

upon or with another—or how they behave towards each other, in subduing, neutralizing, decomposing, combining with, or resisting each other, either in a simple or compound manner. Consequently, with these views of the positions of Physiology and Chemistry, they cannot perform the same work together, in the same body ; for the one is clothed with the higher attribute of organization and vitality, and the other is clothed with the authority of dissolution.

Any organized body being a production of nature, of a vegetable or animal structure, sustains the manner of its existence in all its component parts, according to the nutritive principle, under the guidance of physiological law. So long as this principle predominates in the actual deposit of substance and combustion, organization is carried on ; but in all instances when these properties are withheld, organization subsides. The same vessels, with their fluids, which under physiological law once transmitted to every part of the organism the nutritive elements, are now engaged with their returning mediums, under the guidance of chemical law, in transmitting to every part of the organism, with a hurried and heated circulation, chemically decomposed matter, destitute of natural nutritive elements ; being the process instituted to sustain the body when no nutritive elements are presented for its support. This necessarily results in wasting disease.

The reader will readily perceive that chemical law cannot build organisms ; but it becomes its province everywhere to reduce all organized matter to the dust, when no nutriment is supplied to maintain its progressive organization and vitality.

To elucidate our subject more fully, for the instruction of the inquiring mind, we would observe, that all living organisms require a substance to apply a process of formation, and a constant progressive organization of matter at each moment of time ; a law, also, that selects and arranges its form, limits its size, its power, and its duration. This is physiological law adapting particles of matter and fluid to the construction of an organism, according to its form, size, motive power, and its duration, by a circulating medium that reaches all its component parts. The nutritive elements derived from well-

digested food existing in the circulating mediums in the fluid form, being deposited by them, constitute the mode of its application to the structure at every moment of time.

We must conclude, from the above reasoning, that all human organisms or bodies exist, grow, develop, and attain their plenitude, under physiological law, and the nutritive principle—that this law, when supplied with an adequate amount of well-selected food, of a vegetable, animal, or compound material, must necessarily sustain and constitute the normal condition, and the functional and vital forces of the system.

The true principles of physiological action, in relation to the existence of the human body, with its functional and physical, its motive and vital forces, have been thus far demonstrated and explained with care and precision. Every enlightened mind, capable of appreciating our researches, must come to the conclusion that, notwithstanding our subject is of vast importance to the promotion and maintenance of health, it has been heretofore comparatively shrouded in mystery to all; that we have made an effort to elucidate the subject with comparative clearness, which is worthy of the highest consideration, commending itself alike to every mind that seeks to promote the health of the living body upon principles of reform at once salutary, correct, and satisfactory.

It also becomes the province of physiological law to sustain another highly important position in the great economy of the system. It may be considered that of continuous resistance, at each moment of time, in the normal state of the system, against the encroachments of acids and vitiated matter within its limits, which is at once antagonistical to its progressive power of endurance as a living body, and which should be expelled. But when we are required to represent the character of such matter, it cannot be otherwise than that it should be expelled, for it has become disqualified from imparting any nutritive elements whatever to the system: having fulfilled its required action, it remains a surplus: it becomes the province of this law, at all times, to expel it, and to discharge also, with the same physiological power, from the organism, any material which cannot be organized for the maintenance

of the body, existing in any of its laboratories, under chemical decomposition, and necessarily fatal to the health of the organism, exciting at all times its own expulsion from its offensive action upon the coats of the living organs. We are considering the morbid character of all waste and worn out matter, which has already yielded to the system its nutritive elements, and has become virtually poisonous to the living tissues of the body : this law requires its expulsion from the surface, and alike from the kidneys and alimentary canal.

It becomes necessary, under all circumstances, and in every climate, that this matter should be expelled at every moment of time, from the surface of the body and the lungs, with the timely and proper evacuations from the other outlets, in order that the healthy state of the organism be maintained, which can only exist by its continuous and timely expulsion as it accumulates.

A very important and necessary consideration is brought to our view, when we contemplate the whole organic structure ; and that is, the very high temperature of the living body in its normal condition in every climate, being that heat which is generated in the body by the union in the circulating mediums in every part of carbon and oxygen. The atmosphere and nutritive elements, as they combine in a fluid form, evolve heat at every point in the structure, as well as in the cellular tubular structure, alike of the lungs and of the surface ; maintaining throughout the system and its laboratories an equalized temperature of 98 deg. of Fahrenheit's thermometer. This, when considered as the normal standard, affords an idea of the large amount of carbon which must be consumed within the limits of the organism, to maintain such a temperature for one year in a living body, weighing one hundred and fifty pounds, and to sustain it at every moment of time at that peculiar heat.

In the event of the retention of the morbid matter, above alluded to, within the system, and its distribution to every part of the organism, in a lesser or greater degree, by the circulating medium, the chemical change that is constantly transpiring, as well as increasing in putrescence in such morbid matter, renders it more and more offensive to the natural con-

dition of the system. The combustion arising from its decomposition, under such a temperature, produces and procures the several conditions of diseased action to which the body is subject.

The reader may now be anxious to enquire, Does the human body, in its normal and healthy condition, exist under the action or control of physiological law, or under that of chemical law? We would reply, that it exists alike under the action of both physiological and chemical law; the one existing antagonistical to the other, and at the same time, when the balance of power is maintained between them, they become mutual assistants to each other, and result in producing and maintaining the normal condition of the organism—a correct temperature, a regular pulsation, and an equalized circulation of its fluids to every part and to every organ. It becomes the province of the one to convey the particles of nutriment to their destination in the organs and organism; just as the other dissolves the wasting tissues and fluids, making room for the deposit of new matter. While chemical law, under its continuous action upon the wasting tissues and fluids, as they are expiring at each moment of time—just as the particles of acid gas, substance, and fluid are passing away; this process necessarily creates a demand for a new material of nutritive and combustive elements, to supply the parts they have just made vacant.

It then becomes the province of physiological law to apply such particles of matter as have been received as food, digested and taken up into the circulating mediums, at each moment of time, to every part of the organs and organism, adapted, through the nutritive principle, to replace a living particle or tissue, where it has just changed into acid or expired, and by this process at once to sustain the constant motion of the circulating fluids, and progressive living organization.

With this view of the subject, it becomes evident that chemical law, at each moment of time, decomposes and changes the exhausting material, and renders it antagonistical to the health of the living organism, superinducing its own expulsion from the system—its acidity exciting the physiological laws to separate it from the living parts, and expel it by

its outlets, sustaining at once a healthy condition of the organs and organism. We must, therefore, conclude that physiological laws sustain the organization of living matter, and detach and remove the waste material at the same moment of time, by the actual deposit of substance and combustion from a circulating medium charged with the elements of well-digested food upon the nutritive principle, in the progressive development of substance and temperature in the human body, with the manifestations of its sensitive, functional, and physical powers.

It becomes equally evident to every rational and enlightened mind, that the oxygen of the atmosphere is constantly being employed and united with the nutritive fluid carbon by physiological law, to infuse into every particle of matter its requisite temperature and vitality in the organization of the body, and hence it becomes alike necessary, at every moment of time, to its progressive existence.

It is equally obvious, that the same oxygen of the atmosphere, being employed, in connection with the wasting tissues and fluids, by chemical law, to decompose and acidize every particle of matter as it wastes away, and is detached from the living parts in the body, and becomes alike necessary, at each moment of time, to its progressive decomposition.

Can we not, therefore, with safety conclude, that it becomes the province of chemical law to procure the disorganization of matter; to vitiate the circulating mediums by its increased combustion; and, as the worn out matter and wasting tissues and fluids are expiring at every moment of time, preparatory to their expulsion from the body, through their several outlets, in the event of their retention in the body, that they should be taken up by the circulating mediums in every point of the system and its laboratories, and at once become the procuring cause of the progressive development of human suffering and disease.

We wish this idea to be distinctly impressed upon every mind, that it is the peculiar property of chemical laws constantly to change and acidize the fluids of the organs and organism; as their vitality retires, at each moment of time, to

decompose matter as it expires; when the living animal heat exhausts, to generate another combustion unnatural and deadly,—converting the living tissues, fluids and gasses, into acids and morbid substances—putrid, offensive, and sickening in itself. Finally, from the commencement to the close of its action on the human body, its circulating mediums and organs, it becomes the withering desolation of expiring matter, clothed with the awful majesty of devastation and death.

Now, in review of the position we have assumed in relation to the nutritive principle, it will be perceived that, unless the superabundant waste and expiring matter in the organs and organism be expelled by their respective outlets, it becomes impossible for the nutritive substance and combustion to be deposited from the fact that the very points or places they occupy being full, the nutritive principle is thereby prevented from making her deposits, or from exerting her power in the restorative process over the system and its laboratories.

We are prepared to affirm, without the fear even of contradiction, that whenever the nutritive principle is prevented from replacing the expiring tissues as they exhaust, (from the fact of the acids and waste matter being retained in the organism, and not carried out by the vessels,) the work of chemical death has commenced. The system is under a state of disorganization—there being no place to deposit the nutritive element, disease must be the result.

We would also state as a fact equally demonstrable, that whenever the nutritive principle ceases to replace the expiring tissues as they waste away, by new deposits, from the fact that such nutritive *elements* are being withheld, the system must cease to sustain itself under physiological law, and chemical laws must commence to dissolve its tissues, and consume its carbonized substances and fluids, in order to maintain the heat of the body at each moment of time, as well as to furnish the necessary supplies of nutritive fluids, which the organs and organism require for their lubrication and support.

It becomes equally obvious to the reflecting mind, that, when the human system ceases to receive food or nutriment, in the form either of vegetable, animal or compound matter and fluids,

for the absolute purpose of supplying the organs and organism, the system must exhaust and sicken ; and the longer the nutriment is withheld from the system, the more injurious and devastating is the chemical action at each moment of time. Now the physiological law is of course prevented from sustaining the organism, and the chemical laws commence the consumption of the animal body, sacrificing the elements of its blood and substance, dissolving its tissues and consuming its carbon, to generate its increasing temperature for its absolute maintenance in the living state. This fact is confirmed in all diseases, where nutrition is withheld. The disease is necessarily made much more devastating in its ravages when aided by starvation, the system being compelled to consume itself and all its purer matter, furnishing, as a result, such a high degree of combustion as to increase its fever, and even to drive it to delirium and to death.

No doubt can be entertained, therefore, as it becomes obvious, that the human organism, by the gradual retention, at each moment of time, of its waste or expiring matter, partakes of its vitiated properties ; that as such vitiated matter is taken up and distributed by the fluids of the circulating mediums to every part of the organism, whether it be in the form of fluid, gas, mucus, or acids, it partakes of properties and qualities that are decidedly injurious to the health of the living body, possessing in themselves no nutritive elements, as they are diffused and circulated at each moment of time under the high standard temperature of the body. The several ratios of combustible and putrescent action which the chemical changes assume, must necessarily progress in such matter, and render it more and more offensive, inflaming and irritating as it become more and more putrescent and poisonous in its effects. When such a complicated chemical disorganization is necessarily going on in one portion of the juices of the human flesh and substance, what must be the condition of the circulating mediums and muscles with which it is in contact? This illustration presents at once an idea, imperfect as it may seem, of the diversified characters of diseased action in the several temperaments of the human species.

With such absolute facts before us, we must come to the

conclusion, that all diseased action in the human system in every climate, arises from chemical changes gradually brought about in matter, which does not appertain to the progressive laws, cannot be applied by the nutritive principle, matter that is superabundant and vitiated, and inappropriate for the organization of the living body, its expulsion being necessary, at all times, in order that the normal condition of the system should predominate.

There must necessarily be a source from which the resisting and expelling powers actually derive their energy, at every moment of time, when the human system exists in its normal condition, to expel from the surface and lungs, &c.; and we simply claim, that the physiological law and the nutritive principle endow the system with both sensitive and functional power, from the nutriment and strength it imparts to the organs and organism; that no natural effort can take place without the organs are thus qualified to expel, by the depositing of nutritive elements,—elements, urging by their pressure the motion of atoms, at every point, at each moment of time,—being absolutely necessary to progressive circulation of the fluids and organization of the body, as well as its temperature: That in the event that an attempt should be made to compel the expulsion of matter, by forcing it away from the system through its several outlets, by irritating and exciting its several parts by medicine, it would, on such expulsion, tend to create vacuums, which the juices of the body would be required to replace and fill up, or a collapse of such vessels as are actually deprived of any matter, fluid, or gas, to fill them up, must be the result. This must necessarily tend to prostration, debility, exhaustion and premature decay; so that such a process cannot be restorative in its action, but depletive, from the absence of nutritive elements, at each moment of time in the process, withholding progressive deposits, and thereby promoting its waste. That there exists in the economy of nature, in the construction of this wonderful machine, a process of expulsion, and an actual casting off, in and from all the circulating mediums of the human body, when this action is required to be increased in the circulating mediums of the system; and, as those mediums, in one relation to the whole arrange-

ments of its parts, terminate on the whole surface of the body, as well as the inner surface of the lungs—the latter surface being twice the size of that of the former—at each moment of time matter is passing off, which keeps up the motion of atoms, making a demand and suction as the cellular and tubular surfaces evacuate their matter, thereby keeping up, at each moment of time, a demand for nutritive deposit and combustion, as well as the motion of the circulating fluids.

As we have distinctively represented the action of the circulating mediums in the last sentence in relation to two distinct surfaces at which waste matter is exuded, at every moment of time, in the normal condition of the whole body; we would further state that, in another direction, the circulating mediums of the body in the arrangement of its several parts, terminates also on the inner surface of the stomach and bowels, and at those points waste and vitiated matter is exuded at each moment of time; that such expulsion is necessary to the normal condition; that it takes place at each moment of time, that it also makes a demand for nutritive deposit and combustion, keeping up the motion of the circulating fluids. We might further assert, that in all the glands and mucous membranes the same process of expulsion and motion of atoms is constantly transpiring, representing in the whole that resistance which Physiological Law exerts, in promoting at each moment of time, from every point, the expulsion of that matter which is not congenial to the organism and its laboratories.

We also claim that there is a nutritive power and strengthening principle that resides in all the circulating mediums of the whole of the structure; that in that fluid resides the invigorating and life-sustaining, sensitive and motive-procuring element, that constitutes all the functional and physical, sensitive and vital forces of the human being.

Here we have attempted to give the reader our idea of a *Fluid Physiology*, claiming clearly and distinctly, that the human body, and the harmonious and beautiful arrangement of its machinery, in its cellular, membranous and tissular forms is permeated with returning and distributing tubular structure charged with fluids, uniting and connecting with every labo-

ratory and with every part; that in the chemical properties of the fluids, with their peculiar and complicated chemical qualities are illustrated and confirmed both by analysis, research and experiment. That they virtually are to its wonderful and complicated action the moving cause, that the fluids are to the machine what steam is to a steam engine, when properly confined within the limits of its action; only the action is compound and natural, made by the complicated force of combustive and explosive elements, as well as electrical and vital powers, while the other is simply mechanical. Novel as the idea may seem to many, in its abstract sense, we have no hesitation in affirming and maintaining its truth and correctness, as a science more particularly connected with chemistry in its confirmation.

In further sustaining the idea of the resisting and expelling forces of the human body, while under the action of disease, however much it may depend upon the constitutional temperament and original hereditary condition of the vital forces of the system; we are prepared to affirm that physiological law is sufficiently active to expel and throw off its diseased matter by the several outlets of the system—the morbid matter exciting at every moment of time the Physiological laws to action, will thereby induce its own expulsion. While it is thus engaged in expelling its offensive and irritable acids, the natural laws frequently exhaust their natural and functional power, and prostrate the system on account of the absence of nutrition; but, when the timely aid of the nutritive principle resuscitates its exhausted energies by nutritive fluids, it is enabled thereby to carry out its expelling powers, and virtually to rid the system of its diseased matter, without exhausting itself, enabling the physiological law to predominate over the chemical changes upon its fluids, which must result in returning vigor, animation and health.

The new and consistent *theory*, we wish to advance upon natural and scientific principles to every enlightened mind, becomes absolutely and practically necessary, where our object is to remove disease and establish and sustain health by the natural laws of the system; for no restorative process can

secure health or remove disease, without nature's original action by physiological law accomplishes the work ; and that, too, must be accomplished by the nutritive principle selecting, preparing, and depositing substance and combustion to all its tissues, to revive, rebuild and invigorate the dilapidated and exhausted organs and organism.

We will close this section of our work by giving the reader an idea of the restorative action which we think it necessary to introduce as soon as possible, after the system commences the diseased and wasting process.

The nutritive fluids necessary to aid the, physiological law, in the restoration of the body, must be, in the first instance, bland, mild and nutritive, comparatively devoid of carbon or combustive matter, susceptible of being easily and perfectly converted by the digestive fluids in their exhausted and weak state, into chyle. Secondly, they must be prepared of such materials of compound matter as will be readily taken up into the circulation, and matter of such properties as contain, in themselves, the constituents of pure blood. Thirdly, of these fluids we have prepared twelve, the composition of which is in perfect accordance with physiological law, adapted to the several temperaments of the consistency of milk, rich with pure nutritive matter. These fluids are administered and used with the most remarkable results. It seldom or ever fails increasing the weight of the individual under treatment, however dilapidated and debilitated the person may be. It can be used freely by children at all ages ; and when administered freely to men and women seeking returning health, we have never known one instance in which nature did not increase her effort to restore the body. Fourthly, it is very palatable, easy of digestion, almost, we may add, chyle itself, so readily is it taken into the circulation. The deposits of nutritive matter proceed from this pure aliment, so as to increase the system in weight and proportionate strength and vigor, whenever used with proper medication. Six pounds increase in flesh have been given frequently to adults over the age of forty, in ten days ; ten pounds in many instances in fifteen days ; thirteen pounds in nineteen days ; and forty pounds in three months. So many and so various

are the instances of increase under medication with vegetable substances, that the fact is carried alike beyond cavil and doubt. We are prepared to prove facts of this character in the persons of any who are seeking returning health and vigor. This system and theory has become a demonstrated science, and cannot be confuted. True as nature is to herself, in all her departments, we claim her laws, both physiological and nutritive, to carry out our principles. Without any deception, without any cavil or imposition upon the credulity of any person, we advance it as a fact, as true in itself to the human system as the very laws that govern its existence. We have prescribed for years, and shall continue to prescribe for individuals of both sexes, under all classes of disease and derangements of health, weakness, and protracted debility; and from the satisfaction which we have already given to hundreds, we offer to invalids a new, safe and natural means of restoration to health. On seeing the person, an examination will decide the prospects of recovery.

PART SECOND.

NEW THEORY OF DISEASE.

Matter under Chemical change—Acid and Poisonous Matter—Its Retention in the Body—Obstructions—Surplus Matter taken as Food—Chemical Changes on Surplus Matter—Improper Food and Diet—Waste and Worn-out Matter retained—Disorganized Tissues and Fluids under Chemical change—Expulsatory and Resisting Influence a Natural Law—The law of Diffusion—Natural Physiological Heat—Chemical Heat or Combustion—Origin and Cause of Fever in every Degree—Inflammations, &c.—Chemical Combustion results in Disease—Retention of Urine and Fæces—Contagion—Use of Poisonous Medicines—Heat engendered on Surface—Climate—Proper Food—Improper Diet—Properties of Vegetable Matter—Alkalies—Vegetable Matter more congenial than Animal Food—Mastication—Digestive Fluids in Circulating Mediums.

In the confines of so small a work we cannot extend the views of our theory and principles so as to be absolutely satisfactory to every mind, for this reason, that our time and space will not permit it. We can only shadow forth some of the prominent outlines of a system that is at once sustained by the researches in Physiology and Chemistry, and their most able and scientific professors, comprising all the light that can be derived from those sciences, with our own resources of analysis, illustration, and experiment, which may be demonstrated to every unprejudiced mind.

We can only, therefore, attempt, in a very concise manner, to present to the minds of our readers the primary cause of diseases, as it has exhibited itself in the human race in every age of the world.

In a particular investigation of the chemical properties of matter, and especially such matter as is evacuated from the human system, from its pores or surface, from the lungs as well as from the kidneys and alimentary canal, the facts that are elucidated by the numerous experiments demonstrate, that the matter passing out of the several outlets of the organism; and its laboratories, is charged with deleterious acids, and

poisonous properties, highly injurious to the living organism.

It will be readily admitted that the human body, in its healthy and normal condition, and in the fullness of life, in order fully to maintain that state, must expel and throw off from its surface, by the circulating mediums of the nervous and carbonized fluid eirculation, a large amount of waste matter, in the form of acids, fluid, or gas, mucous, or other material, as well as the evaporation of heat and moisture (having been deprived of its nutritive element) from the porous surface, and from the lungs, from the kidneys, and the bowels; that all the matter thus passing out at the several outlets is not only absolutely destitute of any nutritive element, but acid and morbid in its nature, deadly and poisonous in itself, and consequently deleterious to any living animal organization.

From actual experiment it has been repeatedly ascertained, that the waste matter passing out of the porous surface alone, amounts to five-eighths, by weight, of the substance, fluids and solids, received by the system as food and nutriment, in every twenty-four hours, being more than one-half; that this matter in itself is in the highest degree detrimental to the existence of animal life, and with other imponderable gases, become the source of disease to those who inhale it from other bodies. That, also, which constantly passes out of the lungs is equally morbid, and highly fetid. This morbid matter also exists in great abundance, is evaporated at every breath, and is charged with matter similar to that which passes out of the porous structure, being carbonic acid gas, and other matter equally pernicious to the living organism. Were it even impossible for the system to inhale it again—it possessing in itself no life-sustaining properties whatever, when received by the circulating mediums of the lungs, and distributed from their cellular structure to the heart, thence to the circulating mediums of the whole body—it would necessarily suspend the combustion and vitalization arising from the carbon, and suspend at once the natural laws of the eirculation, and commit the body to the silence of the grave.

The human body, when confined to a close chamber during repose, frequently exhausts the atmosphere of its oxygen, and the air becomes surcharged with carbonic acid gas, and the lungs are required to inhale it again, in a greater or lesser degree. Diseases are imperceptibly and gradually induced in this manner, and the whole organism becomes vitiated, and actually poisoned, terminating in an inflammation of the fluids in the circulating mediums; and is, in every climate on sea and land, a fruitful source of disease, arising from inhaling such matter as escapes from the body and lungs during sleep, in apartments which are not sufficiently ventilated, or charged with atmosphere to sustain the combustion of the body in its normal state. The properties of urine and excrementitious matter passing out of the alimentary canal, will receive further elucidation at another part of this work.

In order to impress the mind of the reader with distinct facts in relation to the absolute cause of the rise and progress of disease, and the various derangements that occur in the organism, it becomes necessary to convey our ideas in simple language, and not to oppress the mind by proposing too much at the same moment of time for its comprehension.

In presenting an illustration of demonstrable facts connected with the living powers of an organism, so fearfully and wonderfully made, destined to measure its pulsations at every moment of time for seventy successive years, which depends upon its own life-sustaining powers to maintain its progressive existence, it at once becomes a subject of vast and momentous importance, no less than the problem, whether man is ever to escape from the midnight darkness that enshrouds his mind, to behold the light of a new day dawning upon him, when the glorious sun shall illumine the horizon, and the strange mystery of his physical existence be revealed in the simple, harmonious, and consistent declarations of truth, in a day of triumphant and successful reform.

We shall now be called to consider four distinct conditions of the human body by which diseases are generated.

1st. The absolute retention of morbid matter in the circu-

lating mediums, which ought to have been expelled from the porous surface.

2d. "Obstructions" arising from an actual surplus of nutritive element furnished the structure as food.

3d. The chemical changes which this matter may undergo, as a surplusage in the whole system, and its laboratories.

4th. The effects of "improper diet" furnished the body for its sustenance.

In reference to the first cause of disease, mentioned above, being the absolute retention of morbid matter in the circulating mediums, which ought to have passed out at the surface, we remark that it is one of the most common and frequent sources of disease in every climate, and at every season of the year.

When we present this idea to our readers, it becomes necessary for us to inform them that a large proportion of the substance furnished as fluids or solids, of a vegetable, animal, or compound material, as food, after the system has taken up their nutriment, by converting into fluid, by the digestive process, and distributed their substance and combustion for the sustenance of the organs and organism, their remains a surplus, which, from the fact of its having yielded its purer properties, remains entirely devoid of nutritive element; possessing no vitalizing principle, it becomes exhausted and useless matter, existing in the fluids of the circulating mediums, the blood-vessels. This surplus, in the normal state, is carried out upon the whole surface, through the pores of the skin, in the form of fluid, gas, acids, and mucus, with the evaporating heat and moisture, representing one class of matter which becomes the constant source of disease when retained.

Now, we refer to another class of matter which emanates from disorganized tissues and fluids, which once existed as component parts of the organs and organism, and which is, at every moment of time, expiring and dissolving into acids, giving up its vitality because it has performed its service in the organization. From the high temperature of the body, this, when retained, changes, at each moment of time, from acids into putrefaction and heat, from chemical combustion.

This matter is of a character more morbid, the carbon being converted into carbonic acid, and, of course, destitute of any nutritive elements or vitalizing properties, taken up, as it must be, by the circulating mediums, and carried to the organs and organism, through the whole mass of the blood, seeking another outlet, is diffused and intermingled, by the physiological law, in its effort to dilute its virulence and to resist its poisonous properties at any one given point, and yet it is retained but to engender disease, by its acid and putrescent action upon the living fibres of the organs and organism.

We will refer the reader to another class of matter, existing under this head, derived from another source. It must be at once admitted, that the motion of all the joints, in upholding and moving or exercising the body, must wear out material, and separate it from the living fluids ; so the exercise of all the sensitive, functional, and motor nerves must also wear out matter, and the muscles, in their multiform and diversified action, during exercise, and labor, and severe and protracted fatigue, or in either case, wear out matter likewise ; and all this matter, as it constantly, at each moment of time, only during rest, is making or developing a material which is highly offensive and excitable, being mostly all impure fluid carbon, changing with the high temperature into carbonic acid and other chemically decomposed matter, which, when connected with great fatigue, becomes the immediate cause of soreness, inflammation, and fever. This, like the other waste matter above noticed, is destitute of any properties of vitality, and equally morbid and deleterious. Connected, as it were, intimately with the latter, is such worn-out material as must be generated by the muscles constantly rubbing or sliding by each other, as they distend and contract with every motion of the body and limbs, on amounting to a large proportion of the like material, made more offensive by the increase of the temperature of the body. During such exercise, labor or fatigue, this matter must necessarily, when retained, assist in vitiating the fluids of the circulating mediums, and every mucous membrane, gland, and laboratory of the living body, involving alike the brain, spinal tubular structure, and

their innumerable distributories to every part of its complicated structure. All the matter noticed in the above elucidation may be alike gradually and progressively, and almost imperceptibly, retained in the organism and its circulating mediums and laboratories, in constant motion, at each moment of time, increasing from acid to morbid, from morbid to putrid, and from putrid to dead matter, in the chemical change that must increase at each moment of time, as the heat of the body rises in chemical combustion, and must result in a greater degree of irritability, inflammation, and disease, throughout its circulating mediums and their extremities, alike devastating in its effects to the health of the whole mass.

There never exists in the human body any foul or offensive matter, retained from passing out at its natural outlet, the porous surface, but it is immediately transmitted to some of the other organs or laboratories of the structure, for the purpose of effecting its escape under the expelling and resisting influence of the physiological law, against all such matter that prevails in the system; so that where the porous surface is glutenized with dead, albuminous and other mucus, its escape is prevented in quantity, more or less, at each moment of time, and it is transmitted by the circulating mediums to the lungs; as its air cells and tubes, and the immense surface they contain, make of themselves a heavier claim on the circulating mediums of the body for lubricating fluids, to keep up the moisture and fluid at each moment of time, with the evaporation that must transpire in the breath, than any of the organs and channels of the system. Consequently, with this plain and demonstrated fact before us, we must affirm with confidence, that the distributing vessels readily deposit it at this great outlet, and frequently, in so doing, render the tender membranous tissues of the air cells and tubes sore, sensitive, and glutinous, obstructing respiration and evaporation. The same application of the argument is alike and equally applicable to the stomach and bowels, liver, kidneys, heart, and finally to all the organs of the system, more or less. Were it not for the great and wonderful economy of nature, in this great effort at diffusion and expulsion, the body would be frequently pros-

trated in an instant, without any hope of relief. The same result is manifest in the liver when obstructed. The law of diffusion and expulsion seeks some new outlet on the surface. So in relation to the fluids retained by the kidneys and womb, in the diffusion throughout the whole surface, one of which, that of the menses, is clearly and positively marked on the surface, as well as those decided manifestations of the diffusion of bile that are so evident in bilious climates. We cannot but consider the peculiar character of the whole of this waste matter, producing disease when retained beneath the surface, or when the porous surface is closed from a change of the atmospheric temperature, from the accumulation of glutinous matter, or from a sub-paralysis of the nervous tissues, gradually superinduced by neglect and want of cleanliness and healthful exercise. But in all climates, in each age of life, in every sex and temperament, the same, if retained and taken up by the circulating mediums, must, at each moment of time, vitiate every organ and affect every mucous membrane; it must excite the heart, in making its effort to escape at the several outlets; it must irritate the lungs and constipate the bowels, derange the action of the kidneys and bladder, and finally spread one general excitement over the whole nervous system.

Chemistry informs us in her elaborate researches by experiments, that all this class of matter which ought to have passed out at the surface, with the deadly irritable acids, its life-destroying, poisonous, and inflammatory properties, all of it possessing no other character whatever, acting upon the living fibres of the animal body at every point, at every moment of time, is destined alone to hurry on the fearful tide of disease, to overpower the natural laws, and to spread at once a destructive and desolating plague throughout the organs and organism.

Before we close this part of our subject, we may affirm that if five-eighths of what the system receives in weight of food and substance, and fluids, is passed out in waste matter on the surface;—if this be a fact, which has never been doubted, what must be the quantity, in a week, in a month? enormous;

and therefore are we surprised, when its retention is promoted, at its deadly results. Added to this is the normal temperature of the body under physiological law, being 98 deg., the heat of our hottest summer days ; and this temperature is a living temperature, being the result of organized vitality. It exists alike in the human body everywhere. There exists, also, another heat ; but this heat is not organic ; it is not the result of life ; it is not under physiological law ; it is not the genial, material warmth, that exists at every moment of time, as it is generated, but is a heat of chemical combustion, an explosive, putrescent compound, from ammonia, phosphorus, and nitrogen, hydrogen, sulphur and carbonic acid, and other material, with more or less diseased carbon. These constitute this combustion, wherever it exists in the human body, or in any of its organs.

This new and peculiar view of the temperature of the human body is divided into two distinct classes of temperature or heat in the animal body : the one designated as a physiological temperature, derived from nutritive, living elements of organized tissues, and the action of fluid oxygen and carbon on the lungs, surface, and in all the system—heat being evolved at every point, when certain portions of carbon at every moment of time, and at every point in the organism, are being consumed. This temperature is 89 degrees.

Another generator of heat originates in chemical law, on all decomposing matter, and anti-nutritive, material acids, effervescing and consuming with fœtor and putrification. This, surrounded with the normal temperature of the body, is the generator of all combustion above the temperature of the standard heat. It is not a temperature of living, but of dead matter,—the combustion of decomposition.

The new theory of fluid physiology is harmoniously and consistently elucidated in the remarks contained in the subject under consideration ; for every substance taken into the circulating mediums, in the several relations they sustain to the organs and organisms, must be reduced to a fluid form, in order to deposit its nutritive aliment and combustive fluid temperature ; and as its wasting tissues and fluids expire and assume a fluid state, the result discloses the importance of

comparatively a fluid diet, assisted with nutritive fluids for the sustenance of the body.

In fact, when the porous surface is closed, by being habitually neglected, the skin becomes inactive and comparatively weak and dead. Its soft, warm, elastic and contractile properties become weakened and harsh; the pores become surcharged with acid, rancid, and irritable matter; and as the nervous tissues that are interwoven on its surface transmit the irritations to the spine and brain, through their circulating medium, the result is the production of nervous and neuralgic affections, pain, pressure and heat of the head, twinging of the nerves of the neck, rheumatic pains in the spinal column, anxious and uneasy state of the mind, coldness and numbness of the extremities, paralysis and apoplectical affections, and every excitable and depressible state of the nervous system, from actual torpor and languor of the whole nerves of the brain, to the frenzy of nervous delirium and frantic despair.

When the porous surface is thus involved, it does not only shut in and retain in the circulating mediums this chemically changed matter, but it shuts out the oxygen—the vitalizing influence of electrical currents, with the light and heat in the atmosphere, which aid in the invigoration of the nerves and strength of the body, as nutritive elements. We are of the opinion that the porous surface enhales the atmospheric virtues of oxygen and electricity, modified as it may be by the constant claims of the circulating mediums; that the surface derives its natural warmth from the commingling of oxygen and carbon, in their cellular and tubular structure; which aid in those exhalations of matter which is constantly transpiring on the surface of a healthy organism. We consider that the whole surface is virtually a breathing surface; that it inhales and exhales in its natural state, in a similar manner to that of the lungs, and in its cellular and tubular structure heat is evolved, highly congenial to the nervous tissues, aiding at all times in equalizing the fluids of the circulating mediums, and the healthful deposit of nutritive elements. We must, therefore, conclude that the whole system not only suffers from the retention of those deleterious substances above

alluded to, but it suffers also from those invigorating properties derived from the atmosphere, being resisted.

Much more might be advanced in this interesting head, satisfactory to the individual seeking balmy health. Our effort, though a humble one and comparatively weak, may possibly advance such ideas, as some scientific and master-mind may expound with greater clearness to an enlightened public, at a time when elevated scientific reform shall unfurl her banner.

We will now attempt to present to your earnest attention a class of matter, derived from another source, and illustrated in such a manner as to give it a distinctive character, which is the second subject for our consideration, namely: *Obstructions, arising from an actual surplus of nutritive element, furnished the structure as food*, taken in the form of fluid and substance.

Notwithstanding the organism may exist under physiological law, in a state of comparative health, termed the normal state, performing all the physical and functional requirements of the system correctly, receiving and digesting its aliment, and maintaining its progressive existence under correct principles, there is a crisis in the human system, when it actually deviates from the natural laws, and the work of diseased action commences.

Our inquiries are about to be directed especially to the effects produced by a choice selection of food in the form of vegetable, animal and compound material, originally designed for the maintenance of the human body ; that which, from its quality, would confer on the organism the highest state of vigor, and healthful action ;—a sanguine bilious temperament, in the prime of youthful vigor, in the beauty and strength of manhood. That disease does seize upon such, is a fact too often demonstrated, and lays the vigorous and noble structure in a few short days in the silence of the dust. Obstructions commence gradually, unnoticed, unheeded as unfelt, and that too, from furnishing the system with too much of the best and choicest of food. Habitual *intemperance* in eating, generates a superabundance of nutritive matter to the organs and organism, notwithstanding it is digested by the action of healthy

and vigorous digestive fluids, and reduced as all material must be, to a thin, ductile, and highly carbonized fluid, possessing the properties alike of substance and combustion to sustain the nutritive principle in making its deposits of substance and temperature, in all the organs and organisms, in precisely the amount they need. When this is the case, the circulating mediums must contain such matter as is superabundant and highly carbonized, uncalled for by the organism,—that which cannot be applied—must remain unappropriated, because it is virtually superabundant in all the circulating mediums of the structure and her several laboratories. No part of the organs and organism can claim it, from the fact that they are fully supplied.

The question may here be asked, for the benefit of the reader: In what state does such material exist, and where does it find its location in the organism? It is not prepared to take the form of fibre, because there is no room for it in that department. Nor can it take the form of mucus; for the mucous membranes are supplied. It is not permitted to take the form of cartilage or bone; for that portion of the structure needs it not. It cannot be transformed into fat; for all the cellular structure is full. It is not permitted to take the form of organized matter, in any of the organs, or organism; for the distributing fluids have pressed a full quota to all the points of vital deposit, and combusive temperature;—hence it becomes an obstruction, a surplus, an embarrassment, precisely in the ratio of its existence, more or less.

This question might be asked: Could it not be discharged through the pores of the skin? By no means. It is neither waste nor worn-out matter. It possesses all the constituents of blood; consequently it is rich in carbon, iron, albumen, &c., &c., yet it is not the blood; for the circulation by the action of its oxygen, has used all the nutritive carbon it could convert for the use of the system. It cannot sustain the temperature; for we have not sufficient oxygen to make it into fluid caloric. It cannot, therefore, come under the action of physiological law, and cannot be applied in building up the organism; for it is not called for, it is not needed, it is a surplus. It neither

exists under chemical law, nor under physiological law, notwithstanding it has gone through the first stages of the digestive process.

Another question may be asked, in relation to this surplus material: Can it not pass off through the kidneys, or by the bowels? We answer that it cannot; for it is not in the form of excrementitious matter. It has not lost its vitality, nor has it fulfilled its office in the organic structure. Where then does it find its locality? In its unorganized state, we affirm, that it lines the inner coats of its tubular and cellular structure, throughout the circulating mediums. It is found on the inner portions and surfaces of the several laboratories, and on all the coats of the mucous membranes on the sheaths of the muscles. It encumbers the fluids of the nerves and brain. In this peculiar condition it is comparatively inert, but embarrassing to the complicated machinery of the whole organism. Its effects are plainly and distinctively manifest in reducing the volume of the pulse, and retarding the action of the heart. It deadens and reduces the vital functions and nerves, producing torpor and drowsiness. It destroys the equalization of the circulation and temperature of the body. It is located and distributed, in its inert form, in every part of the system, obstructing and embarrassing every part alike, in the ratio of its existence, more or less. It at once becomes an obstruction to the vital, sensitive, and functional energies of the whole organism, and is a very common source of the most acute and active forms of disease, in every climate.

We here have delineated and represented the precise condition of the human body that precedes an attack of disease, in connection with the natural high temperature of the fluids in the circulating mediums, charged, as above stated, with carbon, sulphur, and iron, and all the constituents of the nutritive elements of the system. This ignitable and inert material, existing as it does everywhere within the limits of the organism, subjected by its age, and the period it has been retained, to chemical changes and decomposition, in its various degrees of action.

From a great variety of predisposing causes, including

fatigue, want of rest, and the sudden changes of atmospheric temperature, from cold to hot, and from a humid to a dry atmosphere, chemical change commences either in one or more of the laboratories at a time, creating pain, generating inflammations (loss of appetite, and disease), connecting with the circulating mediums, everywhere producing a languid and feverish condition of the system, or it breaks out into one general combustive flame of fever, closes and contracts, by its heat, the whole porous surface, by vitiated, putrid, and combustive action; it calls in the deadly agents of waste matter, by thus closing their outlets; it induces retention of urine, arrests the action of the bowels, excites the nervous system, and swells the tide of delirium to the heated ventricles of the brain; it at once spreads one general devastation of flaming putrescent combustion throughout the circulating mediums; prostrates the physiological laws; while chemical laws triumph in their ascendancy, consuming the carbonized and sulphureted fluids in fearful majesty, and swaying over the organism, in protracted fever and delirium, the dread sceptre of death.

The new theory establishes a consistent doctrine with respect to the cause of fever, and superabundant heat in the human system. The same principle which we have already advanced is maintained throughout the science of fluid physiology, independently, comparatively, of the acknowledgement of any other system. Physiological law, and chemical law, as before clearly illustrated, are equally concerned in the development of heat. Whether it be above or below the normal temperature of the body, it is generated in the system, as above stated, by the union of carbon and oxygen, and we may add here, electrical currents; while physiological law, and the nutritive elements in the circulating mediums of the system, are, at every moment of time, with the agents requisite, evolving the normal temperature of the body, at every point within the organism and her laboratories, equalizing the heat in all its component parts as it evaporates.

Chemical law and the wasting tissues, the worn-out matter, and the inert carbonized matter, and all the superabundant anti-nutritive material, the ammonia, and phosphoric acid, and

sulphur, when retained within the body, enter into a combustion of heat. Surrounded, as these must be, with the original high temperature of the circulating mediums, heat is thereby evolved, of a character that is abnormal, generated from disorganized and decomposing material. This condition of the body, and the action of the chemical laws on matter retained, uniting with and thereby increasing the whole volume of physiological and chemical action, results in the increased temperature and inflammatory heat of fever. Chemical law, sustaining the ascendancy in its devastating influence, consumes rapidly the wasting tissues ; and physiological law expels the heated fœtor from the breath and surface, alike from the kidneys and bowels, which, in all cases of fever, is manifestly highly morbid, fetid, and poisonous.

If these evaculatory processes should not be procured, the retention of such matter would increase the higher stages of chemical putrescent combustion and heat, and result, necessarily, in decomposing the whole organism in death, from fever, being the triumph of chemical law over the living organization, where the natural physiological living temperature has no nutritive elements to sustain it. The generative power of living heat ceases, and the high temperature of chemical combustion has its unlimited action, and in the closing scene, vitality itself is consumed.

We have made an effort to convey two distinct ideas in relation to the generation of heat ; the one is the healthy, natural standard temperature of the living healthy body ; the other is the deadly, consuming combustion of burning tissues, increasing as it adds fuel to its flame, in the generation of fumes and burning gases, until it consumes the whole substance of the blood and muscles. The united and combined action of these two sources of heat is what the new theory claims as the absolute cause of fever.

The different developments of the several kinds of common, simple, or malignant and putrid fevers, in their several comparative manifestations of heat, as in the progressive degrees of heat in each of their several stages, differ in temperature precisely in the ratio of the amount of inert and waste material which is about being added or diminished

in the chemical conflagration of fluids, and their peculiar ignitable and combustive properties, more or less. The whole of the new theory of fever is alike applicable to every age, sex, and temperament, and must exist, from the same unerring causes, in every climate, and on every soil. Wherever man breathes the vitalizing oxygen, or feeds upon the same element, with its wasting and decomposing flesh, oxygen, in its contradistinguished relations to the human body, becomes at once the giver of life and the procurer of death.

We are at once convinced that the reasoning which we have applied to the illustration of our subject, does not meet the enlightened mind in the form of vague and imaginary assertion, from the wanderings of unsettled conviction ; but it comes to it clothed in the garb of scientific truth and demonstrable fact, which cannot be refuted as long as chemical analysis and research unfurls her banner of light to the inquiring world. It would take a large volume to enter into a full elucidation of the subject of fever. The very few and pointed remarks which we have offered, give a clear outline of our view, but by no means is the subject exhausted. The field of truthful reasoning it has opened, and the fact of its actual existence, as represented, is destined to change the practice, and produce a wide-spread revolution in medical science.

We have heretofore noticed, very distinctly, the different qualities and properties of such matter as the system retains, which becomes the basis of that combustion, which is at once destructive to the progressive development of the living organization ; and that the human body frequently retains and accumulates such matter by a gradual, imperceptible, and progressive surplusage, distributed alike to every portion of the organism, and remains inert for quite a period of time—in some instances for months and years—in a peculiarly dilapidated state of the system ; the age of the matter gradually prepares it for, as well as predisposes it to ignition, without offending, materially, the fluids of the circulating mediums in their action, forming a kind of false membrane on their inner coats, and the same everywhere on the organs and channels of the whole structure ; but it exists as a continuous train of ignitable matter, suscep-

tible of a high combustion, but its power is inert, quiet, latent ; the same as the force of gunpowder may be inert and latent, when no match or fire is applied to it. The great variety of circumstances, time, climate, atmospheric changes of temperature, heat and cold, the rarified and condensed state of the oxygen, fatigue, exposure, and improper diet, become the predisposing cause of its ignition, which may be slow and continuous, burning gradually as its combustive matter becomes ignitable—sometimes vivid, and at other times suspended, the decomposing process by chemical law being furnished with but small portions of carbonized or sulphureted matter at a time, or, on the other hand, highly ignitable and combustive, as before illustrated. We therefore consider that the different types and forms of fever, existing in different climates, and even in this climate, arise from the acid or morbid, rancid or putrescent form which the chemical combustion assumes, the state of the atmosphere, the degree of temperature, the quality or quantity of carbon, sulphur, nitrogen, oxygen, &c., about to enter into this chemical combustion, as well as the original, active, or passive temperament of the organism.

Before we dismiss this part of our subject in reference to "Obstructions," we would observe further, that the chemical action that takes place at every moment of time on such matter, in bodies and organisms, which derive a hereditary constitutional debility from their progenitors, or become comparatively weakly and dilapidated from intemperance, or are dilapidated from previous diseases, or poisonous medicines, or maltreatment under previous attacks of disease, or from imperfect physical constitutions, where the temperature of the body ranges below the normal standard ; the results of the chemical action upon such matter would be, in fact, somewhat different, and would necessarily generate, under such circumstances, diseases of a diversified character. Acids, and heated and putrescent gasses, would be developed in the organs and bowels, the kidneys and surface, superinducing a relaxed state of the organism, engendering dyspepsia, fluxes and chronic diarrhœas, gout, inflammatory rheumatism and other inflammatory diseases, humors, serofula and eruptions on the skin.

These all may originate from the decomposition of matter existing within the limits of the circulating mediums, connected as they are with the whole structure.

We have now approached that part of our subject which involves, thirdly, the chemical changes which this superabundant matter may undergo, which, from the peculiar nature of our subject, we have already partially noticed in the foregoing pages. Yet our subject is by no means exhausted ; but this pamphlet is too small for a full elucidation.

The four temperaments which exhibit themselves in the human race require a passing notice, in relation to the action of the chemical changes they may develop. The nervous, sanguine, bilious, and lymphatic, as well as the compound temperaments, in their different ratios of admixture, must be brought under careful review. It must also be remembered that each of those vary more or less in the manifestations of their temperatures, notwithstanding the normal temperature of each are alike in the healthy state. We still discover that acids, morbid gasses and *chemically* poisoned fluids, originating decomposition in the system, will sensibly affect a nervous temperament with neuralgia ; when its action in a lymphatic temperament would be that of a dull pressure or pain ; and in a bilious temperament, with a firm, enduring nerve, it would not be felt at all, when its manifestation would be in some one or more of the organs in an entirely different form of disease.

The decomposition which is at each moment of time transpiring in the human system upon superabundant matter, by chemical combustion, must be alike antagonistical to the natural laws controlling the several temperaments distinctively, which must exist also in the admixture of the several temperaments, under the same normal temperature of the body. This at once places this matter, in reference to the exhibition in each of the several organisms, in a diversified relation to each other, from the fact that each of the several temperaments and admixtures must give, through their circulating mediums, varying as they do each from the other, a different channel for the same morbid and

combustive matter to unfold or develop its peculiar diseased action. The same matter affecting each of the several temperaments diversely, exhibiting a new and varied form of disease in each, notwithstanding the offending cause, the chemical acidity and decomposition is, in fact, the same. The further illustration of this decomposing matter would involve, therefore, in the first instance, a knowledge of the properties and qualities, chemically considered, of the substance received by the organism as superabundant food ; the properties of which, in the present stage of chemical analysis and research, could at once be ascertained, and the action of the chemical laws in changing and decomposing such matter into a state of putrescent combustion, would be accounted for in a manner as satisfactory as the anxious enquirer could desire. We could readily go into this explanation of the properties and qualities of the different acids, gases, heated fluids, and morbid substances, but the field here is too limited ; and, moreover, the means would not justify the end—from the fact, that its action is already known to exist antagonistically to all living organized bodies.

It becomes equally satisfactory for the anxious reader to know, that all this matter is in and of itself destitute entirely of any life-sustaining properties, but on the other hand, is charged with the malignant power of procuring diseased action, antagonistical to the vital principles and natural laws of any living, organized human body. This is sufficient for us to know, as a demonstrable fact.

It becomes obvious to the inquiring mind, on reflection, that a multitude of diseases, in this manner, are clearly and satisfactorily accounted for, not only in their obtuse and latent, but likewise in their inflammatory and acute form ; and we say further, not only in the chronic, dyspeptical, and scrofulous manifestations, but in its nervous, neuralgic, and excitable features ; at the same time unfolding alike the causes of latent and morbid diseased action in the laboratories of the system, as the acute, rheumatic, and gouty inflammations, which effects result from the acids upon the channels of the body, and in the circulating mediums, generating inflammations, and all eruptive

and scrofulous manifestations—finally, furnishing a key, at the same time, to the diseased action of the organs and outlets of its complicated structure.

We also claim, for the new theory of Fluid Physiology, a higher position in the field of scientific reform than has ever been yet attained, by exhibiting, in the pure light of truth, the chemically defined properties of the living and organized fluids and their nutritive elements, as they exist in the circulating mediums of the body, and, at the same time, claiming the discovery, by chemical analysis, careful research, and experiment, of the actual character and property of the offending agents and diseased temperatures.

We do not wish to affirm here more than we are warranted by facts. We are satisfied that disorganized matter, on a living organism, cannot produce anything else but diseased action, whether it aids in its effects, or becomes the sole cause of its antagonism to the physiological laws in their defence of the system from its ravages, it still is, and must continue to be the cause.

Another very prolific source of diseased action on the living organism, is the retention of urine (but it cannot be expected in a work so limited, that we should investigate all its morbid tendencies), as it exists in the circulating mediums of the system. When that morbid and highly irritable fluid is absolutely formed, and seeking its outlet from the system, by the laws of diffusion, intermingling with the depositing fluids in all their parts, at each moment of time, gradually accumulating as it evaporates from the skin and breath, affecting the nerves, spine, and brain, and, finally, every laboratory in the system, it must necessarily engender from its properties a new series of diseased action.

Take the original standard of temperature at 98 degrees, when a minute portion of urine is habitually retained, at each moment of time, chemical decomposition must constantly pass upon it, increasing its heating acidity and putrescent combustion, vitiating alike *all* the circulating mediums generally, diffused and combined, with all the deposit of substance and combustion, to every part of the organs and organ-

ism ; and thus it necessarily becomes, from its properties, as they are chemically defined, the procuring cause of palpitations of the heart, a highly excitable state of the general nervous system, with extreme heat and pressure on the brain, scrofula of a character approaching to leprosy, with other burning and irritable humours, with general lassitude and emaciation, involving also the lungs and mucous membranes of the bronchial tubes and trachea, with asthmatic affections, from the highly irritable properties of its fluids furnished, the whole cellular, tubular, membranous and tissular structure, throughout its complicated machinery.

Little has yet been said in relation to the excrementitious matter, and the evaculatory process from the alimentary canal, the habitual retention of which becomes also another very alarming and fruitful source of diseased action, of a character yet more pernicious, if possible, than the former. Its habitual retention, with the normal temperature of the body, renders it more and more offensive ; heated and fetid gases are, at each moment of time, being evolved and diffused into the circulating mediums—through those especially which lead to the liver—vitiating and inflaming that fluid (out of which the bile is chemically set free, by the union of fluids in its laboratory), vitiating alike all the fluids as it gradually charges the system, producing the most deadly and spasmodic torpor of the spine and brain, with their distributories. It becomes, also, the common cause of vitiating the blood in the circulating mediums, and from its very high stage of putrescent fœtor, aided by its locality, suspending the evaculatory process of the whole length of the alimentary canal, habitually and unnecessarily detained from two to seven days beyond the natural period of its expulsion, effectually charging the human body, at each moment of time, even through the lacteals themselves, with the heated gases, from the deadly fœtor of putrefaction within the body, until it ulcerates its channels, until disease is exhibited in the deadly form of nervous spasms, fainting, convulsive and other sudden fits, torpor, congestive chills, paralysis, and apoplexy.

The habitual constipation of the bowels gradually entails upon the living body, from the comparative ease in which it

diffuses its gaseous and malignant poison, a train of complicated and peculiar affections, gradually leveling its death blows at the very principles of life itself, and undermining, imperceptibly, the constitutional energies of the whole body, predisposing it to contagious diseases, to sudden, overwhelming, and fatal attacks, of the most malignant forms of disease.

Is the reader not alarmed as well as surprised to review the different sources from which this general class of matter, under chemical law, is obtained, and the great amount which must be brought into existence by the natural laws of the organism, at each moment of time, in the course of one year. It exists alike under all circumstances, in every living human body, in its normal state—the same in every climate on the globe. We cannot be surprised, therefore, that its gradual, partial, as well as full retention, under all the laws of its action, within the limits of the human body and its organs, should prove to be, by the peculiar chemical character it assumes, at each moment of time, a source, an unlimited and constantly accumulative source, of disease to the human race.

Chemistry stamps such matter with the deadly impress of its destructive elements, and, without hesitation, cavil or doubt, unfolds the tale of its devastating influences on “the living body.” We cannot for one moment be surprised that, on account of the effluvia and noxious gasses inhaled by a living healthy body, from an organism thus charged with such matter, the laws of contagion are so marked in their character, and so painfully fatal in their effects. If the atmosphere of diseased element that surrounds the living body is so highly charged with contagious matter as to be communicated to another organism, we would ask the anxious reader, what must be the properties and character of the matter in the confines of that body and its circulating mediums? How diseased must that condition be, when the fumes and gasses alone of its internal fires are so deadly!

We must conclude by stating, that this general class of matter has no nutritive property whatever. Its elements having no organization; it cannot be employed, only to devastate and destroy the living body. The various forms of this

destructive element, existing as it does in the manner represented, must ever become the very fruitful source of humors, inflammations and fevers, in all their simple and malignant forms—of misery, pain, and loathsome, withering disease, to suffering humanity—forever destructive and antagonistical to the vital energies and physical constitution of man. Finally, this very class of matter, if permitted to accumulate, presents at once a momentous fact, too solemnly true, that it carries with it, alike to the young and to the old, to the bond and the free, to the rich and to the poor, in every age and in every clime, the dread sentence of death.

There is a strange and fatal ignorance that marks the course of man, in relation to a knowledge of his physical constitution. No light breaks yet upon his clouded path. Apparently, impenetrable mystery has lulled the inquiring spirit to rest within his bosom, and it is almost considered maniacal for him to seek instruction. The learned and eloquent, the orator and the statesman, the reverend clergy, with heaven's purer light beaming on the soul, the kings and princes of the earth, our philosophers and men of science, the lord and peasant, the wealthy and avaricious, the men of years and hoary heads, prudent men and wise, have been all involved in this strange gloom for centuries past. Year after year has rolled away, and the medical profession has stood as the dark veil that covered the people, and shut out the sacred light of truth,—selfish, cruel, arrogant and conceited, all alike ignorant of the cause of disease and its cure, wrapped in a cloud of impenetrable darkness, and have been destined to grope their way through lancets and blood-cups, scarifiers and blisters, ulcers and setons, and the horrid stench of decomposing tissues and fluids; superinduced by the deadly caustic of mercurial poison to a bed of premature decay; lulled with the deadly opiate into a strange and wild lunacy; or by the *life-inspiring* alcoholic draft, excited into drunkenness and death.—This exists in the most enlightened country under heaven, in the middle of the nineteenth century, the age of light and reason, of scientific research—emphatically the age of reform, of improvements in the arts and sciences—a day of invention—

a day of gospel light—a period when the spirit-moving press sways her sceptre of light over the ignorance of man, fed by the lightning's wing with new-born thought, she spreads it with a furnace power from sea to sea. But the science of medicine is still shrouded in a delusive mystery, antiquated and worn-out notions, two thousand years behind our day, venerated for its age, its wisdom, in a dead language; committed to a craft who build her temples with the sighs and groans, the blood and flesh, and bones of men. It is melancholy, indeed, to behold the cloud of obscurity, the fatal and increasing darkness, which is thrown over the mind of man, under the delusive name of science, everywhere, by the despotism of a craft forbidding him a knowledge of himself. Such a state of things is destined to stifle the efforts at reform for many years; and there will be only here and there a spot where the sunlight of scientific truth shall break through its darkness.

Melancholy, too, in the administration of the most deadly drugs, poisons innumerable, and highly condensed chemical preparations, swelling the awful tide of pain, and delirium, and death, one single grain of which being enough to make the reason frantic. This is to them a skill profound. When the patient falters and quivers in a death-faint, from the loss of blood, prostrated by the power of science, from the savage lancet, it is to the craft a fine effect; when the sallow skin and wild glassy eye designates the victim, and the horrid stench of purulent mucus throws the fetid breath around you; yes, when ulcers are preying around each tooth, dragging them from their sockets,—it is a cure! His loosed teeth and ulcers, and swollen tongue saved, yea, saved his life! Delusive! strange! This becomes the highest wisdom of medical skill! exalted science! the healing art! Before heaven's high court of chancery these doctors stand or fall. Motives then will turn the scale; and wilful ignorance will seal their fate.

None of these means are congenial to the physiological law and the nutritive principle. To wound the body, to take the living blood from the circulating mediums, and suspend the process of deposit and combustion; to ulcerate the glands; to

drug, with vegetable and mineral poisons, and deadly opiates, the body, serve not only to destroy life, but reason ; not alone the body but the mind, in mania, the deadly whirlpool—prevents its self-defence. We have no connection, thank heaven, with such treatment. The immortal soul will tell the tale of woe, in the world: to come, when every tongue shall confess. We cannot but look upon our fellow-man with pity and the utmost sympathy, mental sympathy, for his darkness, his strong delusion, that carries with it the fangs of death. These are a class of foreign obstruction to the living body, that sinks it into the dust.

The fourth part of our subject is now brought under our consideration, and that is, the causes of disease originating in, and arising from, *the habitual use of an improper diet* ; that is, the partaking of such elements of food, in the form of vegetable, animal, or compound matter and fluids, as is not congenial to the organism, and cannot, by its digestive fluids, be fully prepared for distribution by the circulating mediums ; which, even when dissolved and taken up through the glands into the circulation, is not nutritive in its character—possessing but little substance and combustion, which is adequate to the task of replenishing, by deposits, the exhausted and wasting tissues, but furnishing a material for that purpose which is charged with acids and impure matter, generating dilapidation and disease to the whole organism.

It becomes highly important that we should refer to the process of digestion by the gastric juice, bile, and pancreatic fluids, all which unite in their peculiar solvent and separative properties, in changing and converting the material received in the stomach and bowels as food, into a thin ductile fluid state, which constitute the nutritive fluids, which contain all such elements as are required to supply the organs and organism with such substance and combustion as will sustain, as well the temperature of the circulating mediums by its carbon, as the healthy and nutritive deposits, required to be made by those mediums, as they distribute it to every part of its complicated structure.

We would here observe that the selection of a proper diet

for man, in all the different positions he sustains to himself in the various avocations in which he is necessarily employed, calls for the exercise of the judgment of the individual himself, having relation to the circumstances which surround him in life.

Where it is possible for man to select such material of fluid and substance for food, as are precisely adapted to the demands of the organism, and its normal temperature, in accordance also with the climate in which he resides, as well as his own peculiar temperament, we have not the slightest doubt that with the highly important duty of cleansing the surface freely by ablutions, and healthful and proper exercise, the physiological and chemical laws would act harmoniously in their different spheres within the human structure, so as to prevent, in a great measure, the occurrence of disease, and ensure comparative health. The health of the human body is sustained alone upon nutritive elements; and out of these elements the pure or impure state of the fluids are made. So it is in regard to all the circulating mediums, organs, and laboratories, in their demands for nutritive elements. For from their sustenance, if a proper material is furnished, health is the result; if an improper material, or that which cannot be dissolved or converted, derangement and disease must result from such a diet.

The diet of a Northern and Eastern climate would not be congenial to the system in a Southern and Western climate, and *vice versâ*, the middle climate between, would doubtless require a selection of diet peculiar to its locality, whether it be on the highlands or lowlands of the country. So that each locality or climate requires its proper selection of nutritive element to avoid what is falsely termed the diseases of the climate,—which are virtually the diseases of the diet;—the material fed the system, of which the amount of oxygen inhaled by the lungs and surface was incapable of converting into nutritive and combustive healthy deposits, under physiological law and the nutritive principle, by its digestive fluids; and which consequently remain to be consumed and disposed of by the organism, under chemical law and decomposition, resulting necessarily in disease. Thus far the law of climates is claim-

ed by the new theory, existing in the same relation to the two given laws of the system,—governed by the amount of oxygen required to develop the normal or abnormal state of the body,—and having its universal application.

Every intelligent mind must be convinced, that in order to secure the digestion of food, in every climate, much must depend upon the quality and quantity of oxygen inhaled by the lungs and surface, introduced into the circulation through those channels; as well as the electrical cements in the atmosphere, which, when they exist, as they always do, more or less, according to its condensed or rarified condition, or its dry or humid state, and which tend to carry on the solvent process through the brain and nerves of the stomach, which constantly sympathize with each other to a remarkable extent, through the nervous circulating mediums, by their sensitive and functional properties: for without this connection the contractile and expansive motion of the stomach could not exist. Thus the great work of digestion depends upon causes which have not been claimed conclusively by any other theory than the one we must advocate, from the pure principles of scientific truth which it unfolds.

We may here offer a slight allusion to the effects originated by an improper diet, furnishing the stomach with material which, in fact, is incapable of being dissolved.

To make our reasoning clear, we must again state, that the new theory, in one of its prominent features, claims that the whole surface, *when unencumbered and clean*, in a healthy state, (but not otherwise,) under the proper organic temperature of the body, inhales oxygen and exhales carbonic acid gas, in the same manner as the lungs, at each moment of time, when that surface is kept sufficiently *clean*, for the very minute tubular and cellular structure and nervous tissues to perform this work perfectly; and that the action of the surface in the manner above alluded to must perform those functions, in order that the evaporation of its moisture and temperature should be complete. When perfect *cleanliness* is absolutely kept up, and the surface is *entirely freed*, from day to day, from the exuding matter which is constantly passing out at

each moment of time, a certain degree of vital combustion is taking place, when every cell and every pore becomes the receptacle of oxygen, meeting its very condensed and ignitable carbon; generating a beautiful, soft glow of living combustion and caloric, with elastic nervous tissues; preventing the system, for the most part, from being injured by the changes of atmospheric temperatures. But few bodies, except that of the growing infant whose surface is kept pure, are kept in sufficient repair to attain this development of vitality to its fullest extent.

The new theory claims, in accordance with the acknowledged state of the atmosphere, that electricity must be necessarily inhaled at the same points and surfaces of the lungs and body, in their several tubular and cellular structure; and that it is a nutritive element, especially for the nervous tissues and fluids; and that it is at those points absorbed, when the condition of those surfaces will admit of this process; and also that the fluids and nerves have an affinity for the electrical currents, which are highly congenial to the spinal nervous fluid and that of the brain, and are at each moment of time receiving that higher order of nutritive element for its supply, (as it exhausts, at each moment of time,) as a vital deposit, connecting with a higher order of nervous carbonized fluid, sustaining progressive vitality, which is diffused through the nervo-electric circulation. Light also, and that peculiar kind of heat procured by the sun's rays, acts, in like manner, as highly nutritive to that higher order of organization—the brain and the tubular spinal fluid, and their distributories. Thus the nutritive principle claims her peculiar relation to the maintenance of vitality in nature's wide-spread domain, under the direction of nature's God, in the vegetable and in the animal kingdoms.

Different climates control the peculiar qualities of food, according to the amount of animal carbon and substance requisite for the defence of the body from the action of too low a temperature. Where there is too much cold, and too high a temperature—where there is too much heat, or from the action of an equalized temperature being between the cold and heated temperature, the amount of food should be modified by a greater

or lesser amount of one or the other, or of each ; and it should be varied also, according to their humidity and dryness, in the same ratio of illustrative arrangements.

The intelligent reader will at once discover the importance attached to climate ; for each of the several states of the atmosphere, to which we have just alluded, partakes of a different property of oxygen, more or less condensed, or more or less rarified, according to the specific character the atmosphere assumes in each of the climates.

As oxygen is necessary for the consumption of food, and for the generation of vital temperature, in the fluids of the circulating mediums, it must necessarily depend upon the properties and qualities of the nutritive aliment employed, for the correct development of that amount of heat which becomes requisite to sustain the normal temperature of the living body, in each of the above climates, varying in the amount of animal carbon, more or less, as each of the temperatures of the several climates vary in the properties and qualities of the oxygen contained in each of their several atmospheres.

It must be remembered here that oxygen is employed, under physiological law, with the relative amount of carbonized nutritive aliment, for the sustenance of the living body through its circulating mediums, in the deposit of its substance and its normal temperature, in its organization, at each moment of time, and also for its progressive existence.

It must be also impressed upon the mind of the reader, that the same oxygen is employed, under chemical law, with the relative amount of wasting carbonized tissues, as they expire at each moment of time, to make room for the new deposit ; and that when a superabundance of unemployed or unappropriated carbon exists, the chemical combustion and decomposition must vitiate the fluids of the circulating mediums, and result in engendering diseases, both morbid and acute, which is an abnormal state, and is necessary also, at each moment of time, for its progressive destruction. A proper diet, in the one case, when adapted to the temperature of the climate, and the amount of the oxygen of its atmosphere, must necessarily result in the normal condition of health. When an improper diet is indulged, which is not adapted to the temperature of

the climate, and the amount of the oxygen of its atmosphere, it must necessarily result in the abnormal state—that of disease. Therefore, we learn, that it is not the climate that is at fault in the production of disease, but that it is the material of food which is not adapted to the state of its oxygen, which is the fruitful source of disease. The reason why some men enjoy health, comparatively, alike in every climate, is from the fact that the selection of their diet secures it to them.

The next very important question which arises for our elucidation is, what actually constitutes the most appropriate diet, under all circumstances, for the sustenance of the living body, or what food is best adapted to develop the vital energies of our race, in the civilized world. Is that diet a vegetable, animal, or compound diet?

The several temperaments are involved in this important inquiry, and have their peculiar relation to sustain in its consistent illustration; but we must omit them for want of space.

The great design of our Creator, in the construction of this wonderful piece of living mechanism, was, that it should be sustained by a nutritive principle, and for that purpose nutritive elements were created. When man was required to dress the garden and keep it, his luxuriant reward was, “that of all the trees of the garden thou mayest freely eat.” This is the first knowledge we have of food being applied to the use of man; and to this day they are luxuriant and delicious to his palate, cooling and refreshing to his taste, nutritive and congenial to the development of his health, his beauty, his vigor, and his vital energies. They remain yet as a living memento of His superlative kindness and special benevolence to the being He formed, in His own likeness, as lord of the earth.

We, therefore, consider that all ripe fruits, in their several seasons, in the rich and beautiful variety that adorns the abodes of men, considered under the head of vegetable substances, adapted to the climates in which they grow, are to man a nutritious and valuable diet, and ought to be freely used, from the pomegranate down to the luscious grape, with the milk and honey that flows in rich abundance through the land of the free.

Berries of every description, and all the variety, are not only

healthful and toning, but medicinal, healing, cooling, and cleansing to the whole organism, and sustains the nutritive principle, endowing our fluid physiology with its richest juices, and most salutary fluids, congenial to the development of the normal condition and a mild and vigorous temperature of the body. They also contain that true organic alkali for which the organism has a peculiar and positive affinity.

The new theory claims that almost all berries, fruits, nuts, apples, pears, peaches, currants, grapes, plums, in the endless variety of their several species, are not only nutritive, but medicinal, cleansing, alterative, relaxant, diuretic, and diaphoretic, and tonic, anti-scorbutic and sedative in their several actions upon the stomach and bowels, and they are designed, undoubtedly, by the great and the wise Jehovah as medicine, healing and invigorating to the circulating mediums, endowing the living fluids with the choicest of juices from the garden of nature in every climate.

Consequently, in their seasons they should be used in rich abundance, even if they affect the stomach and bowels, so as to expel from them morbid, glutinous, mucous matter. The invigorating properties of the juices of the fruit being so congenial and natural to the human body, they awaken the physiological laws of the system, enabling it, from invigoration, to resist the action of all vitiated matter, and cause a healthier condition of the system. It has been noticed that when a medicinal effect has been produced by fruit, that it has relieved the system frequently from that morbid material which the superlative medicines of the age could not reach, without, in some instances, taking out by ulceration a whole set of beautiful teeth—such being the only scientific means known of assisting nature in her extremity. We say, eat ripe fruit freely, and hand it to the parched lips of the prisoner who, under the despotism of a craft, is undergoing the life-restorative ordeal of depletion and starvation. Tell them again, we say, to hand fruit to the sick. It contains in it a cooling balm to the empty and feverish stomach; it sustains the nutritive principle, notwithstanding the solemn edicts against their use by the so termed “Faculty.”

Green and unripe fruit is injurious, generating acid. They are not digestible, and may be considered an improper diet.

All vegetable matter, being the growth of the soil, which has been appropriated to the sustenance of the human body—such as potatoes, turnips, parsnips, carrots, onions, cabbages, salad, spinage, and the various kinds of roots used in the several climates—they are all nutritious, easy of digestion, containing starch and albuminous matter, and are considered to be a good diet, variously prepared. Musk-melons, water-melons, and such classes of vegetable matter, is also congenial to the development of the fluids of the circulating mediums of the human system, and are considered salutary.

The several grains—such as wheat, rice, barley, oats, rye, corn or maize, millet, peas, beans, lentiles, and, finally, all the grains, are proper for the use of man, and are considered to be wholesome and nutritious.

The inquiry may be now made in relation to the use of vegetable matter, in preference to the flesh and fat of animals. Vegetable matter is preferable, for this reason: "Carbon and hydrogen invariably occur in all parts of plants; they form the constituents of all their organs, and are essential to their existence." "The perfect development of plants, and consequently of all vegetable matter, is dependent on the presence of alkalies, or of alkaline earths; for when these substances are totally wanting, their growth will be arrested; and when they are only deficient, it must be impeded." "All cultivated plants require alkalies and alkaline earths, although each of them may use different proportions of the one or of the other." We have taken these remarks from the ablest chemist of the age, "Justus Leibig." He stands pre-eminent in the investigations of the constituents of the human body and the circulating mediums; and when we make a choice of vegetable matter, in preference to animal flesh or fat, it becomes our duty to convince the reader, if possible, that all vegetable matter, being the production of the soil on which it grows, must have, in order to its growth and formation, potash and soda, or the vegetable cannot exist as such matter. All the grains are alike dependent upon such matter for their absolute formation, and are rich in alkalies. The same author informs

us that "Every *part* and *constituent* of the body is obtained from plants or vegetable productions. By the organism of the plants are formed those compounds which serve for the formation of the blood. There can be *no doubt* that the nutritive parts of plants must contain all the constituents of the blood, and not merely one or two of them." Now, if this last quotation be fact, of which there is no doubt, vegetable matter must be more congenial to the health of the living body in every climate, easier of conversion, and better adapted to produce vigor, strength, substance and vital combustion, than any other substance, as a diet; so that the more of this vegetable matter, comprising all that to which we have above referred, is consumed and eaten by man, the less liable will he be to disease.

The reason we claim alkalies as highly important in this work is, because our new theory of fluid physiology claims an alkaline circulation in the human body, as absolutely necessary to its growth, development and progressive existence. We are firmly convinced that vegetable matter, in and of itself, contains as much carbon for the generation of the warmth or temperature of the system as animal matter does, or the meats of fat animals—nay, we may say more; for the reader must remember that the horn, hide, tallow and fat meat, which constitute the bodies of animals, with their blood, life and strength, are actually made out of the vegetable herb and grass of the field. With the activity and strength they absolutely receive from vegetable diet, the high temperature of their bodies also, who can affirm, with any degree of consistency, that vegetable matter does not contain in it a nutriment equal to all the constituent properties of pure blood, and at all times and in every manner better adapted to impart to the human body vitality, strength, substance and combustion, as a nutritive element, than highly fat meats, after their life is extinct, and their blood "*the most nutritive and richest portion*," is all abstracted from the flesh? Is there, in fact, a great amount of nutriment left? We are absolutely driven to the conclusion, that vegetable matter is better adapted to unfold the rich, living tone of complexion, that vivacity of

health, and that firmness of flesh, elasticity of nerve, and constitutional power in man, than any other aliment.

Let us, for a moment, survey the inhabitants of the British Isles. We refer to the peasantry of that country. Perhaps there is no part of the world in which the European race are so fully developed, in complexion, form and feature, nerve, strength, and constitutional endurance. The finest models of the male and female are there found, from the very fact, that seven-eighths of their diet is purely vegetable, and has been, from generation to generation, for centuries past. As soon as they reach this country, and begin to consume the immense amount of animal food which it is common for men to consume here, the result is, they lose their complexion, firmness of flesh and constitution, and that principally, if not wholly, from a highly carbonized animal diet.

We are therefore of the opinion that a vegetable diet is the most nutritious and congenial to the system. The digestive fluids perform the work of converting such matter, with less functional effort; with less exhaustion of their fluids; consequently the system receives nutriment more perfectly adapted to its physical condition, and possessing more of the properties of pure blood.

But in relation to the general question—what class of nutriment is best adapted to the human body as a diet, in order fully to promote its healthy and normal condition, in all temperaments, and in every situation in life—we would answer, that a vegetable compound diet of different substances, with comparatively a small quantity, say one-eighth, of animal matter, constitute the most appropriate diet for man. To the individual who exercises severely, or performs a large amount of manual labor, more animal food may be used, in a cold atmosphere and climate: but otherwise it becomes the procuring cause of disease: for in fact all animal matter being deprived of its blood, its most nutritive portion, its alkaline property does not contain that amount of nutritive and convertible element, as the vegetable fibrine and albumen would furnish, and requires more labor for its conversion. To such persons as are confined to sedentary employments without much active exercise, an animal diet proves highly injurious, especially when

the juices are destroyed by cooking, and the substance is made hard and saturated with fat. A light nutritious diet, with small quantities of animal matter, vegetables and fruit in profusion, milk, butter, eggs, fish, birds, &c.—avoiding the use of fatty substances or gross food, hot bread and fresh cakes—are salutary and congenial to the system.

Salt meat, beef, pork, ham, mutton, veal, grease, lard, and the bodies and flesh of fat fowls, and all vegetable matter fried in fat, hot biscuits, fresh fermented bread, rich pastry, pickles, vinegar, sweetmeats, preserves, and all heavy substances, when habitually used as a diet, in any climate, except the extreme north, must engender disease, destroy and reduce the digestive fluids, and encumber the system with anti-nutritive matter. These as a whole, used habitually and moderately, are an improper diet; but used freely, they always tend to derange the system, and become the procuring cause of disease, on account of the highly carbonized fluids they furnish the circulating mediums, and must, sooner or later, undermine the energies of the system, shorten the allotted years of life, sow the seeds of humors, inflammation, scrofula, rheumatic and gouty affections, and eruptions on the skin, boils, and general loss of strength, and nervous debility of the whole system. When such material is under decomposition in the system, much of their properties cannot be adapted by physiological law to the furnishing of the lubricating fluids to the system. They furnish highly carbonized acid, irritable and excitable fluids, the chemical combustion of which engender fevers of the malignant form, and consequently send thousands to a premature grave.

Fresh fish, and even pickled and salt fish, shell fish, oysters, muscles, clams, small birds, rabbits, squirrels, chickens, ducks, fowls, &c., &c., used moderately, with vegetables, constitute a good diet.

It becomes our imperative duty to affirm, unhesitatingly, that all spiritous, vinous, and malt liquors, mead, wines, and cordials proceeding from fermentation, generating alcohol, are, to the human body, in every climate, chemical relaxants, antagonistical, under all circumstances, to the nutritive principle and physiological law, in their injurious and pernicious effects; for they possess no other. They benumb, disqualify,

and injure the whole body in the performance of its vital, physical, and functional action. They are at all times life-destructive and poisonous. They cannot be used as stimulants. They do not possess that property, but are powerful excitants and irritants, and possess no strength-giving property only that of maniac and torture to the nerves and brain. They act as powerful *relaxants* alike to the strong man and the invalid, sinking the spirit and mind into drunkenness and delirium; deadening and disqualifying the system and its organs for their natural endurance and their healthful action. Their use always generates acids and poisonous gases. They cannot be digested. They possess no nutritive elements, but are wasting and deadly in their action on the stomach, inflaming it, cooling it off, and relaxing its muscular tone, when it is not carried out of the system too rapidly. It becomes the case with some drunkards whose miserable lives are prolonged, that they discharge the fluid by the kidneys and surface much more rapidly than others; while, in some instances, these excitants perform their fatal work in a few weeks. Chemists and physiologists both concur in the fact that they are all foreign to the human body: that the juices of the flesh, and the fluids of the human body, contain no alcohol. Alcohol is a slow, delusive, bewildering, and death-procuring poison; brother, yes, we might say twin brother to opium, pernicious, deadly, and destructive to body and mind, to vital force and reason. Never permit such drinks and drugs to be given to the sick; seek not the distinction of dying drunk under scientific treatment!

Intemperance in eating destroys its millions, while intemperance in drinking numbers only its thousands; but when united and compounded, they become fruitful sources of the most malignant diseases: placing the system in that relation to itself in which it is at all times ready to receive contagion, and spread it far and wide in deadly desolation.

We wish to present to the minds of our readers one very important physiological fact, very necessary to be clearly understood by all persons seeking the promotion of health. All food designed for the sustenance of man must be converted into fluids, in every instance and in all climates. No sub-

stance whatever received into the human stomach, can furnish the slightest possible nourishment to the body, without it is absolutely changed and converted into fluid, and that, too, of a very pure and fine texture, to admit of being taken up through the lacteals, or absorbent vessels of the bowels, and transmitted through the proper channels to the circulating mediums for distribution in the deposit of substance and combustion for every part of the structure and her laboratories. However little known this fact may be to the community generally, it is nevertheless strictly true. Mastication, or chewing of food, is one of the most important preliminaries to its digestion, and highly necessary to the healthy action of the juices of the stomach. Unless the food is kept long enough in the mouth, under that process, to intermix with the saliva, from their ducts, it cannot yield its nutritive elements fully to the circulating medium.

No food can, therefore, be readily converted into nutritive fluids, without its action under the process of a proper and timely mastication. By compelling the stomach to do more every day and every hour than nature designed it should do, (as is always the case when mastication is almost entirely omitted,) the stomach becomes weakened gradually; the gastric juices become necessarily reduced and exhausted; the food, from imperfect mastication, irritates its coats, superinduces inflammation and the accumulation of acid; induces also, a morbid ravenous appetite, and excites its nervous tissues, all of which are procuring causes of disease and dyspepsia in the whole of the fluids of the circulating mediums, and even make the gastric juices acid, destroying their living, alkaline, and solvent properties. The food itself becomes imperfectly converted, and it ferments into acid and even putrid matter, by the gradual, continuous, and repeated offence, habitually inflicted upon it from unmasticated material. This state of things produces general nervous weakness, almost imperceptibly; coldness of the extremities, general languor, with paleness of the countenance, costiveness, flatulency, wind, pain, and consequent sourness of the fluids of the circulating mediums, and the laboratories with which they are connected. In such instances,

therefore, it is not so much the quality of the food that engenders disease, as the fact of its imperfect mastication.

We must now call the attention of every candid and reflecting mind to another very prolific source of disease, originating from a cause which has hitherto escaped the notice of physiologists generally, and which in our researches for the last eight years, on the causes of disease, we have traced, we think, conclusively, to the very imperfect state of health existing in the animals slaughtered for our consumption.

The flesh animals feeding on weeds, and leaves, and wild grass in stagnant pools, which they are compelled, from the scarcity of pastures throughout our country to devour or starve, cannot afford a material congenial to the sustenance of man in any climate. This is a fact which no person acquainted with our country, and the severe droughts incident to its climate, can, for a moment, doubt. The selection of refuse, stunted, feeble cattle, purchased at the lowest possible price, and the mode of driving and heating their blood, to meet the constant pressing demand of the market, at all seasons of the year, furnish some items in the consideration of the subject of improper diet.

If animal food, taken in its healthiest condition, fed on clover, timothy, and other rich and nutritive aliments and grains, is, at best, an improper diet, what must the nutritive aliments furnished for the human stomach be, derived from animals which are weakly, heated, sickly, and feverish, with ulcerated livers and swollen kidneys? The flesh of such animals, after the blood and life are removed, furnishes a diet for man which cannot possess those properties of nutrition requisite to sustain his finely organized structure. Thus it is that animal food partakes of many impurities, which render it offensive, and which cannot, under any circumstances, be healthful. Besides, animal food is frequently eaten in such a semi-putrescent state, that, had it been kept out of the human stomach for three or six hours longer, it would have presented a putrescent mass of fetid flesh.

These are facts of common occurrence. Such pieces of meat are furnished at a lower rate to the poor, hence disease is engendered in all our cities, among that class of the com-

munity, more fatally and frequently than among any other class of our citizens. We have visited slaughter-houses frequently for the purpose of collecting facts, and making inquiries, from such sources as we consider satisfactory. In many of the western states, we have found the livers of animals diseased generally. In oxen, heifers, cows, steers, sheep, and swine, we have found this fact corroborated, and too painfully true. In some cases we have found the primitive formation of pus discolored and wasted ; in others, ulcers and spreading ulcerations on their surfaces. In some other cases we have found purulent, fetid, yellow, bloody matter, in quantities of a half pint at a time—sometimes purple, and spotted, and swollen—sometimes of a pinkish green color, and filled and covered with pustules, and some portions of the liver eaten away by disease. These represent the condition and health of most slaughtered animals. In sheep, generally, not more than one in fifteen were found with a sound liver, and that one even of an unnatural color. The same indications of a diseased liver are found in swine, bearing about the same proportion. This affection is common ; and when we reflect that bile circulates throughout the flesh, and is comparatively present in every part of the animal, after the blood is extracted and life extinct, what must be the character of the nutritive carbon such material or flesh is prepared to communicate to the human circulation ? We pronounce the flesh of such animals improper diet.

Multitudes of swine are raised for the table in the woods of Ohio, Indiana, Iowa, Illinois, &c. Their chief food is mast, acorns, and beach nuts, &c., and that food rotten and frozen. Part of the winter they feed on roots, &c., &c. Many of them are transferred to a distillery, and fed on the fermented slop, highly acid, which so affects their osseous system, as to prevent them from eating corn from the husk or cob. The very weak and imperfect state of the organization of these animals, form for the sustenance of man, at best, but a very poor aliment. They die comparatively with little struggling ; and their livers and kidneys are in a state of disease and partial ulceration. The bones of such animals are in fact so brittle, from being fed on acids, &c., that they have scarcely strength to sustain their bodies, and their blood itself is very

poor, and then the meat is flabby and soft, and easily converted to oily, rancid matter. A material of this kind we pronounce decidedly to be an improper diet.

It becomes then the duty of enlightened American citizens, in our large cities, to institute inspectors of the livers, lungs, and kidneys, of all animals slaughtered for the markets, and to require of them weekly reports of the number of animals slaughtered, and the actual condition of their organs. The bills of mortality, under this arrangement, would be found to decrease one half, and thousands would be saved from a premature death. If the swine, in the healthiest possible condition, is an improper diet for the development of a healthy human organization, of what character must be the nutritive aliment furnished the circulating and depositing mediums of the human system, from the animal whose growth and original organization is derived from such unhealthy matter, and whose liver, lungs, and kidneys are diseased? We affirm, without the slightest doubt of the truthfulness of our statement, that it is, and ever has been, in every climate, the fruitful and unqualified source of disease. The idea of eating sick and diseased meat, nicely fried, smoked, or in any other form, is disgusting—it is horrible; yet the prevention of this great source of disease has never been attempted.

General debility is frequently superinduced from the habitual use of animal food. A humorous, scrofulous, and purulent state of the fluids, inflaming and vitiating the several organs of the body, is constantly transpiring in our community, from the fact that animal food is at all times too highly carbonized to produce perfect health in the climates of our country. Ulcers, cancers, eruptions on the surface, gout, inflammatory rheumatism, and finally, all fevers, derive their vitiated carbon wherewith to generate their heat and chemical combustion, wholly from this source. It cannot be derived from vegetable compound diet. And why is it that animal food is so universally recommended by the "learned faculty?" For one significant reason. It makes business; it yields its gainful crops of disease. Fluxes, dysenteries, cholera morbus, bilious and malignant diarrhœas, originate from its putrescent decomposition in the body. Persons of sedentary habits, and intellectual occupations, who are required to apply their minds

closely and intensely to deep and continuous investigations and reviews, must remember that animal diet cannot furnish that higher order of fine nutritive aliment for the fluids of the brain, although in small quantities it might be used for the vital forces of the muscles. A cool, dispassionate, and lucid mind, can best be superinduced and sustained by a vegetable diet.

The reader will at once discover the great importance attached to the matter of the selection of our food, for out of its nutritive properties we derive all the fluids wherewith the complicated machinery, at every moment of time, is kept in a progressive and healthful development of all its energies ; and also, that out of our food we may generate all the deadly and protracted forms of disease, in the derangement of the fluids confined in the circulating mediums of the body.

Our subject having been thus far presented to the consideration of an enlightened public, in the discussion of incontrovertible facts that are brought within the comprehension of the smallest capacity, without using a thousand Latin phrases to bewilder and confuse the reader—which constitutes some share of the mystery that disease has formerly been enshrouded in, but which, we trust, is now partially removed, and a common-sense view of the matter entertained in its place—perhaps a better opportunity could not be presented in any part of our pamphlet, for such remarks as appertain to the existence of *the digestive fluids of the human body*.

Here the author claims the new theory of a fluid physiology as a highly important position, considering at once the chemical properties of the different fluids as they are transmitted to and from the several organs of the system. It is the only correct and truly scientific source of information, by which professional men may derive a knowledge of the absolute development of the normal condition of that substance and combustion which these mediums are constantly evolving and urging to every part of the organism ; and, on the other hand, to detect, chemically, the change of these fluids, as they exist in the circulating mediums of the body, and their reversed and antagonistical action to the known laws of the system. For a constant current of fluids are coursing through every part of the organs and organism, and they are never at

rest; but, at each moment of time, one atom or particle is constantly being removed, and another atom or particle is constantly supplying its place; and every atom, in order to prevent a vacuum, is obliged to follow the one which has just left the point before it, so that the motion of the fluids is at all times dependent upon a waste and replenishment. The motion, at each moment of time, is constantly superinduced in the larger volume of circulation in the mediums, by the immense multitude of vacuums which are being created at the million points at which the atoms exhaust themselves; and by a vacuum being thus necessarily superinduced at all these points, there is produced that degree of suction power on the main channels, as to keep the fluids constantly and at every moment of time in motion, chasing each other, increasing or diminishing the velocity of the circulating mediums by the amount of vacuum which is being superinduced, more or less, either by actual combustion, or the actual expulsion of matter, at each of the surfaces of all the organs and organism.

The evaporation of matter and constant cooling off of the surface; the dying tissues, and exhausting fluids expiring at each moment of time under chemical law, at a million points; the nutritive deposits of substance and combustion, replenishing the points that are constantly being made empty, by the new deposits at each moment of time at a million points,—these constantly transpiring, under physiological law, furnish the reason we offer for the circulation of our fluid physiology, all other matter but the vessels themselves in their tubular structure is being acted upon by this universal law of fluids—being that of motion, when once set in motion by the electrical vitality of a new organism, respiring an atmosphere charged alike with the sources of heat and of vitalization—oxygen and electricity. The moment these fluids stop, death occurs at a million points in the system at the same moment of time; and just in the ratio in which their motion is retarded, is the change from the normal condition of the system to a state of disease. Obstructions to this motion of the fluid may exist in any one of the organs or in any part of the system, but the same result is always produced by it—being a degree of death in an abnormal development.

The temperature of the human circulating mediums, being somewhat more than that of the surface of the body, and therefore higher than 98 degrees, aids very much in promoting the circulation in all the circulating mediums, from the fact that a moderate consumption of carbon, at each moment of time at a million points, is constantly transpiring; and in this change of matter and physiological consumption of vitalized fluid carbon, by oxygen, is evolving heat at all those points, which so rarifies the currents of living fluids as to create an attraction and motion of all the fluids to fill up the would-be vacuums just created at the million points. This temperature and heat is physiological, under a law of a normal standard; but when the temperature falls below, or rises above, that standard, it is abnormal. We have here described the mode by which the circulation is carried on in the normal state, in connection with the development and equalization of normal or living heat.

We shall now consider that other class of temperature, existing under another law, which is abnormal, depending upon such carbonized fluid or substance as is not congenial to the natural laws of the organism, but which must be consumed by oxygen. This consumption is not of living, organized fluid carbon, but it is a consumption of gross, vitiated, disorganized carbon, that, on account of the normal temperature, is compelled to go into chemical combustion. The diffusion of this vitiated heat, as long as it is kept up, must increase the glow, as well as the rapidity of the motion of the circulating fluids in their several mediums. This vitiated carbon is principally, if not all, derived from animal food, constructed of imperfect and impure materials, and feeds the supply of diseased carbon to the body to engender a surplusage of heat in all the mediums.

The temperatures to which we have referred may be termed physiological and chemical; the former engenders the normal, and the latter the abnormal temperature.

It is one of the prominent features of fluid physiology in the new theory, that the digestive fluids concerned in the solvent and separative process requisite in the digestive process, exist and remain in constant motion in the circulating mediums of the system, diffused to every part of the structure throughout the whole organism. The fluid termed gastric juice does not

remain present in the stomach when no food is presented to excite its exudation from its coats; consequently it must be supplied from the circulating mediums as it is needed. At every moment of time this digestive fluid is being exuded more or less from the coats of the stomach. In the process of solving and converting the materials or fluids furnished as food, it intermingles and diffuses itself throughout the same, permeating all the matter that the system can supply as nutritive elements to the circulating mediums. The nutritive fluid thus formed must contain and retain the gastric juices, and it absolutely follows it and continues to change, modify, mould, and adapt it, and all the several particles thereof, with the aid of oxygen and electrical currents. The bile and pancreatic fluid maintain the same commingling identity with the nutritive fluids as the gastric juice, and in their united functional properties are diffused and applied to the multiform demands of the progressive organization of the body and its laboratories. Their functional properties in the continuous work of digestion is absolutely carried out through the circulating mediums, until every particle of matter, fluid, or gas existing as the nutritive and combusive elements of the system, are actually separated, every atom distinctively destined to the building up and sustaining of the necessary progressive organization taken up, qualified with its peculiar functional action, and virtually deposited to the part to which it belongs, by means of the magnetical attraction from the larger body in the form adapted to its construction, temperature, and vitalization. Without this peculiar action of the digestive fluids, commingling with the nutritive elements, as they are known to us, human organization would cease.

The three several fluids existing in the circulating mediums return to their several organs, exuding alike whenever food existing in the stomach, from the contractile and expansive action of that organ, superinduces its exudation, and the peristaltic motion of the bowels prepares the ducts to discharge at their given points in the duodenum, or bowel, the bile and pancreatic fluid. These fluids are never at rest in the system. They are constantly active, and constantly changing, at every moment of time, their points of action within the circulating

mediums, until all the nutritive and combusive matter is dissolved, prepared, distributed, separated, and deposited as the continuous rounds of waste and replenishment in the organization are kept up throughout all the organs and organism. It is the peculiar province of the several fluids virtually to separate the excrementitious from the healthy matter throughout the whole structure, and to mete out to every portion of the structure, such property of matter as its locality and condition demand for its lubrication, its substance, or its combustion, in such a manner that every part and every organ receives its due proportion in consonance with its normal qualifications in the arrangement of all its parts. Bile, from its color, is well known to exist in every part of the organism, and consequently in the circulating mediums. It is discoverable on the surface, throughout the porous structure, when it is prevented from entering the liver from the vena portarum, or portal vein, and the duct refusing to transmit it to the alimentary canal on account of obstructions. In such a case it is retained in greater abundance in the whole circulation, diffused to every part on the surface of the whole organism. It displays itself in a morbid and glutinous form, having lost its ductility. Its functional virtues being exhausted, it is not carried out of the system by the usual channel. This superabundance of bile is derived from unhealthy animal matter taken as food.

The other digestive fluids exist in the same degree as the bile, in their healthy state, and are, at every moment of time, being deposited and removed in their several laboratories—the gastric juice to the stomach, and the pancreatic fluids to the pancreas. They are constantly being deposited there from the distributing circulating mediums, as they are needed and taken up, in carrying on the progressive work of digestion.

To convince the reader more fully of the correctness of our position, in relation to these three several digestive fluids, existing alike in the circulating mediums, it is proper to state here, that in their peculiar digestive and solvent processes they exercise themselves in another very distinctive manner, which tends to confirm and corroborate the views which we entertain in relation to their general locality in the system.

When it so happens that the stomach is deprived of food, and the several fluids are not required to act and dissolve nutritive substance there, and nothing passes into the duodenum or bowels, for the action of the bile and pancreatic fluid at this point. These several fluids in connection with the oxygen of the atmosphere, as it is diffused in the circulating mediums, commence their solvent and separative action upon the adipose or fatty matter in the organs and organism everywhere. The system being deprived of nutritive elements, they consume, convert, and apply the material thus acted upon by the digestive fluids in the circulation, so as to furnish the organism with its temperature and substance of deposit, obtained from the elements of the body—reducing its weight by the process of starvation, and compelling the digestive fluids themselves by a physiological effort, with the oxygen, to sacrifice the fat muscle and tissue of the body, and even its own blood, for the absolute preservation of temperature and vitality requisite to its mere existence ; and, at last, if no food be supplied, to close the scene, as the lamp expires for want of oil ; and chemical laws disorganize the body.

We would not wish to insinuate that we are at variance with any of the researches of the able physiologists of the age, in representing with so much accuracy the results of their elaborate researches ; for it is from the knowledge of these works we derive our views, and from the fact of their being correct and worthy of our confidence, as far as they have developed the component parts of human organization.

This new theory claims distinctively a Fluid Physiology. That this wonderful and complicated structure, this vast arrangement of living machinery, is a construction of tubular, cellular, membranous and tissular substances, existing as vessels saturated with living fluids, permeating all its parts by circulating mediums ; that the fluids themselves constitute the motive power, and endow the whole with nutritive substance and combusive elements, with temperature, with functional power, energy, virtue, and vital force, and that the body is only the receptacle and servant of these fluids, when her physical forces are required to be brought into action. When the peculiar chemical combinations of these elements shall be fully

comprehended, the law of scripture will be verified to the satisfaction of every scientific mind, "That the blood is the life of all flesh."

The fluids of the brain, spine and nerves emanating from them, connected as they are with the other fluids as they exist in the several circulating mediums, are to the wonderful and complicated machinery of the human body what steam would be to a steam-engine, when prepared by the furnacc. The virtue and motive power is in itself, when confined by the engine: when it ceases to exist as steam, or when it is removed, the motive power of the machine subsides. The same phenomenon transpires with the human fluid circulation, when confined within their mediums; and when removed, or deprived of their chemical properties, the result is identical—the motive power in the machine subsides in disease, and finally in death.

PART THIRD.

FLUID PHYSIOLOGY.

An Organic Alkaline Circulation—Action of the Alkalies and Acids, two general classes of matter attendant upon two laws—Vital Elements of Organization—Alkalies Universal in Animated Nature, in the Earth, the Vegetable, the Animal—Solvent Processes—Matter under the Action of Chemical Law—Temperature of the Body increases—Acids Exist in this Matter—Liebig's Views—Blood, Alkaline Juice of the Flesh, and True Organic Alkali—The late Discovery by Liebig—Soda and Potash in the Blood—Constant Presence of Acids in the Flesh—New Theory claims Fluid Physiology—The Action of the Alkaline Circulation on Acids—Nutritive Fluids in Disease—Cause of Disease—Neutralization of Acids—Generation of Electrical Currents—Effects of the Alkalies in Preserving the Health of the Body—Acids not component parts of the Body.

IN our progressive illustration of the science of Fluid Physiology, sustained by a nutritive principle in the economy of nature, our new theory claims, as one of its most important positions, the existence of an *alkaline* property in all the fluids of the circulating mediums of the human body. This organic alkali being absolutely necessary to the supply of substance and temperature, in making the normal deposits, which, at each moment of time, are required for progressive replenishment, at those points where the wasting and expiring tissues and fluids are at each moment of time being exhausted and changed into disorganized matter, it becomes absolutely necessary that this organic alkali should exist at such points of waste and deposit, in every part of the system and its laboratories, from the fact, that in the process which is constantly transpiring, the tissues and fluids, under chemical change, assume the character of acids. Without the actual presence of alkalies at the points where these acids are developed, the new-born deposit would be subjected to absorption, and result in immediate decomposition. But when the alkaline properties which exist in the circulating mediums are present, a neutralization of the acids of the decomposing tissues and fluids is produced; and the new-born deposit of substance and combus-

tion is not only protected from the action of the acid, but in the union of the alkalies and acids, at each moment of time, at the million points at which they constantly come in contact, electricity is evolved, which vitalizes the deposit, and at the same time is absorbed and taken up by the nervous tissues ;—transmitted, with its vital properties, to the nervo-electrical circulation, as well as to the spine and brain. We also claim that, without this vitalizing process, organization, combustion, and vitality would necessarily cease, and the result would be fatal to the normal existence of the body.

It will be remembered that we have already elucidated the idea of the existence of two distinct laws, under which the animal organism is qualified to maintain its progressive existence, in its healthful and normal condition. Those laws we have designated as the physiological law, sustained by the nutritive principle, and the chemical law, sustained by wasting tissues and decomposing fluids. We therefore perceive, that, in a general point of view, there exists a peculiar class of fluid matter, which is connected with, and attendant upon each of those laws, in their distinct relation to each other, as well as in their united relation to the organism itself, in the normal development of its substance and vitality, its organization and motive power, its functional energy and physical duration.

In relation to that general class of matter connected with physiological law, we wish distinctively to affirm, in order that the reader may clearly comprehend the sequel, that, all its fluids, atoms, particles of fibre, albumen and mucus, exist within the circulating mediums, as the vital elements of organization, endowed with the properties of living animal combustion, as well as substance, adapted to the construction, and the constant resuscitation of the organs and organism.

This general class of matter, we consider, is, at all times, and under all circumstances, congenial with its normal existence in every climate, endowed with the vital powers of organization, by its substance and combustion under the high standard temperature of ninety-eight degrees of Fahrenheit's thermometer, on every part of the globe. There can be nothing connected with this matter but energy in its circulating mediums, animal life in all its parts, and vital force in the brain and

nervous fluids. Under this explanation of our idea, everything appears harmoniously tending to promote and support energy and life, developing at every moment of time one progressive round of living organized substance.

The organism considered distinctively under this law, is susceptible alone of continuous life, with animate and intuitive power of resistance and defence in its own preservation and protection, from all disorganized and foreign matter, not congenial to its normal state, according to the given duration of its existence.

All this phenomena is sustained by a nutritive principle, constantly carrying out the natural claims of the system for the various nutritive elements, as the complicated arrangement of all its parts required. It must be reasonable to conclude, that the whole of this matter existing under the high temperature of the living body, must claim some preservative compound, in the circulating mediums, in all the organs and organism, or its own temperature would become the predisposing cause of its own destruction. We are therefore led to inquire more particularly, what constitutes its preservative property; is it the oxygen, or the carbon, in the circulating mediums? We would answer, that it exists in neither; for they generate the very temperature, the effects of which we dread.

Is it life, therefore, that sustains its preservative properties in the normal condition of the body? Life is a state dependent upon contingencies and circumstances; it is the result of organization, and, therefore, possesses no preservative powers. Where, then, are we to look for the preservative properties of this general class of matter? What, in other words, prevents its decomposition? We state, unhesitatingly, and proclaim it as a fact capable of the most conclusive, natural, and satisfactory demonstration, that it is a living, true, organic alkali that is adherent to, and coexistent with, this general class of matter, throughout the fluids, the whole mass of the blood, in the circulating mediums in all animal as well as human living bodies in their normal state. The God of nature, in his wide-spread domain, employs this element in the construction of all vegetable matter, in their full development and nature's unfolding bloom—her golden harvests—her luscious fruits—and, finally, all matter

destined for the sustenance of man and animals, cannot exist without these alkalies. The vegetable matter which is constantly decomposing into acids on its surface wherever vegetation exists—these acids are constantly washed down and mingle with the alkalies ; the vital processes of vegetation are superinduced by electrical currents constantly generated in this manner ; consequently, without alkalies in the earth, vegetation ceases, and the vital processes cannot be manifested. The earth imparts it from its very bosom. Without alkali, the earth would be a barren, desolate waste. It exists alike in organic and inorganic nature ; in the earth, the vegetable, the grain, the fruit, the animal,—and in man. This is not a mere whim, nor a vague imaginary theoretical delusion. No, our new theory claims it as a demonstrable fact—chemistry and physiology are bound to subscribe to its existence—without it, the human body would be as sterile and as desolate as the earth itself.

For this reason all vegetable matter has been adapted to the development of animal bodies in their strength and perfection. Alkalies, in the form of dissolved potash and soda, exist in the human blood in all its circulating mediums, for a wise purpose in the great economy of the living organism. Its preservative, solvent, neutralizing, and purifying properties, are alike valuable and important in the great work which the fluids of the circulating mediums are required to perform, in replenishing the wastes as they transpire at every moment of time, in the lapse of three score years and ten. It clothes the nutritive element of every new-born deposit in their million cells, with a preservative property, resisting at every moment of time the effects of decomposing acids, neutralizing them whether they exist in a fluid or gaseous state ; preserving the new organized matter alive, with all the depositing particles of organization and temperature.

We do not wish the reader to suppose that we have but one idea, and in *it* we swallow up all other considerations connected with the fluids of the circulating mediums. We are fully conversant with other properties of matter in the blood, which we do not seek to undervalue, as the great auxiliaries to the development of man ; but we only wish to add an illustration of

the presence and office in the circulation of a true organic alkali, as worthy of our special consideration.

The reader may be ready to inquire, by what authority do you present such an idea? How do you establish a fact at once so salutary in its consequences to the vitalized circulating mediums of the system? We are prepared to give you ample and satisfactory reasons in relation to the subject, and we refer you particularly to the solvent processes that are constantly transpiring in the laboratories of the complicated human structure; as well as in the dissolving of such adipose matter and fibre as, under various conditions of the system, is constantly carried on and produced.

That an alkali, an organic alkali, exists throughout the circulating mediums, we have no doubt; and that it has been found in the analyzed remains of human blood and flesh, is the testimony of our ablest chemists. This is a fact ascertained by analysis and experiment, placed at once beyond cavil and doubt before the intelligent mind. On this basis we proceed to a course of reasoning deduced from the premises already advanced, that will show our sequel of the subject to be both conclusive and satisfactory.

Indeed, it becomes absolutely necessary, in order to enable us to impress the reader clearly with our idea, to refer distinctly to that general class of matter connected with and under the control of chemical law, and thereby place within the reach of every capacity the argument in reference to the peculiar action of this class of matter in connection with the vitalized class of matter to which we have referred above.

This general class of matter with all its fluids, atoms, particles, acids, and gases, necessarily exists and forms a part of every human body in every climate and in all conditions of life. It is present in the normal condition of the body, whatever may be the age, sex, or temperament. This general class of matter is composed and made up of the wasting tissues and fluids, and all that which evaporates and expires within the body, the worn-out and dead material, that has no life-sustaining or health-producing virtues, no vitalizing and nutritive elements, and cannot, by any means whatever, be applied to the sustaining or restoring of the system, because all its properties

and qualities are injurious, destructive, and poisonous in their effects on all living animal and human organisms.

Under this general class of matter, we would wish here to inform the reader that it does and must exist wherever a wasting tissue dies, and finally, at a million points in the system at the same moment of time: that these tissues must necessarily die and exhaust in order that new matter may be deposited, and therefore this matter is the result of the death of living particles and atoms of matter that expire at each moment of time in every healthy body in every climate. The organism, considered distinctively under this law, is susceptible of constant and progressive dissolution and death, with an innate and intuitive power of commingling with living, healthy fluid matter, and engendering disease. In every putrescent change it assumes it becomes more deadly. It is the province of physiological law, at every moment of time to throw this matter off by the surface and lungs, kidneys and bowels, in healthy and timely evacuations as they constantly transpire in the normal condition. The whole of this matter, surrounded by the high temperature of the human body, must necessarily claim some constantly decomposing influence at every moment of time around the circulating mediums of all the organs and organism; the temperature itself aids also in its more rapid decomposition, and becomes the very bed which engenders its putrescent, offensive, and poisonous properties. This renders it more vitiating to the surrounding mediums of the body, being possessed of but little carbon; for its vitality is extinct, and its carbon has been yielded up in the normal condition, and converted partly into carbonic acid. It is necessary to consider distinctly the two general classes of matter existing in the same body at the same time. Physiological law resists every morbid agent in its encroachments, and expels it from the body.

The question may again be asked, what constitutes the decomposing influence present at all times with this matter—that by which acidity, putrefaction, and combustion is kept up at each moment of time, as long as the living body retains its normal condition? We are convinced that the high temperature of the body becomes an auxiliary, with the action of the

atmosphere, in the first stages of decomposition, acting upon matter that is exhausted, just changing from an organic to an inorganic state, yielding up its vitality. This is the class of matter, that, at each moment of time, at a million points, is constantly expiring in every part of the organism and its organs. It necessarily becomes inorganic, dead, possessing no vitalizing elements, seeking its separation from the living tissues; and it is charged with elements which are antagonistic in all their relations, and in every way, to healthy living human bodies in every climate—being endowed with the property, under certain circumstances, of diffusing its poisons throughout the whole organic structure. But in the normal condition the body constantly expels this matter from its several outlets, as it accumulates.

A distinct idea in relation to the two general classes of matter, at this point, becomes highly important to the correct understanding of the whole. It will be, therefore, remembered, that at every moment of time a certain proportion of the whole organic body is passing from the existence of vital juices, fluids, mucus or fibre, into a state of decay, and that this process is constantly transpiring in the living body without cessation. The result of this action represents the constant and absolute presence of the latter class of matter, to which we have referred, at each moment of time, in every part of the complicated structure.

We would wish to impress the reader's mind with a distinct idea in relation to this changing matter, when it expires or dies, and ceases at every moment of time to make any component part of the organism. In this precise stage it exists in the form of an *acid* in every part of the body, in the cellular, membranous, and tissular structure. It is always being made, as the living fibre, &c., is always expiring, and always being removed; so that in the normal condition, this *acid* represents the first form of chemical decomposition, and is everywhere present in the body. It will be perceived at once, that there must be a demand thereby created at a million points, at each moment of time, for nutritive deposits from the circulating mediums, throughout the body, which are virtually charged with *ALKALIES*, for certain important purposes in the economy of nature, to which your attention is directed.

It will be remembered that in the illustration of the first general class of matter existing under physiological law, possessing all the vitality of the organism under the nutritive principle, we promised to refer you to the chemists and their analysis, in relation to the *true organic alkalies*—as our new theory claims the generation of potash and soda in the form of organic alkalies, in the circulating mediums of the living body, at every moment of time, in its normal state, as absolutely necessary to its existence. In confirmation of this view, we shall now quote the language of the most eminent and popular chemist of the age; one who has devoted his lifetime to experiments and investigations with reference to the properties and qualities of the fluids and juices of the human body. He elucidates this point in the strongest possible manner, after closing a series of experiments. Baron Liebig observes, “that, consequently, in the blood a current of dissolved alkalies is carried through the whole mass of the body, and especially through the substance of the muscles; while the FLUID that is in contact with the EXTERNAL part of the blood-vessels and lymphatics, (*the juice of the flesh*) retains an ACID reaction.” Again, he observes, “I have already mentioned that the juice of the flesh of all animals, is particularly *rich in potash*.” The Baron also, in his experiments, states that he finds in the juices of the flesh a new body of totally different chemical properties from *any* before discovered—“a TRUE ORGANIC ALKALI,” to which he gives a name.

We observe that soda is a mineral fixed *alkali*, and that potash is a *vegetable* fixed alkali; so that the reader may not be at a loss distinctly to understand our reasoning in the premises.

In presenting the principles of our new theory, it will be found that they can be so far illustrated as to confirm the truthfulness of science, and to exist alike within the pale of those scientific discoveries that have distinguished the age in which we live, and have become so far within the reach of mental comprehension, as no longer to be shrouded in mystery, but commend themselves to thinking and intelligent men of all classes.

In that general class of matter existing in the human body is that which is elucidated under chemical law, and which

possesses all the *inorganic* properties of the organism and its laboratories. The new theory claims the constant presence of *acids*, in their various degrees of acidity; not that they exist in the human structure as absolutely necessary to its organization or vitality, but that they exist as a result of its constant waste and decay. They are constantly present in the normal state of the organism; necessarily so, because, without the exhausting and decomposing fibre and exhausting fluids taking place, by turning into acids by chemical action, the system could not demand a replenishing process; and without the *acids* were designed to be expelled from the system, the nutritive deposits could not be made in the *replenishing* process of a progressive organization, by means of a nutritive principle and a "true organic alkali." We therefore conclude, that all these acids, at a million points at each moment of time, are constantly accumulating, from the fact that they are constantly seeking the outlets of the system, from the lungs, surface, kidneys and bowels—maintaining thereby the timely and correct evaculatory process.

It must not be forgotten that these *acids* are under a decomposing process of chemical law, and therefore cannot be termed the normal juices of the flesh; but the able and scientific chemist above noticed, makes this remark, which throws some light on our views, in reference to the quality and property of those *acids*, and their absolute existence, where we claim them to exist in our new theory. For the actual cause of their existence the noble baron renders no reason whatever, nor does he account for their constant presence in the juices of the flesh, only that they are found by him. We quote him again: "In the blood a current of dissolved alkalies is carried through the whole mass of the body, and especially through the substance of the muscles, while the FLUID, which is in contact with the EXTERNAL part of the blood-vessels and lymphatics, retains an ACID REACTION." Again he says: "We perceive that a CAUSE must necessarily be in ACTION at these POINTS, which prevents the removal of the FREE acids, or IF THEY ARE REMOVED, reproduces THEM at each moment of time." And again: "The blood-vessels and lymphatics contain an ALKALINE fluid, while the surrounding fluid, that of the flesh, is ACID;

the tissue of which these vessels are composed is permeable for one or the other of these fluids.”

We have endeavored to present to your consideration, in as clear a manner as possible, the existence of the ALKALIES and ACIDS, under the two distinct laws above noticed ; and, in offering our reasons for their existence, we consider our position both truthful and safe. For further demonstration, we call to our aid the learned and satisfactory evidences of the correctness of our position in this particular, although the subject is of vast interest to the physiologist and true physician ; it requires an effort on our part clearly to convey our idea of the manner of the existence of ALKALIES and *acids*, and their relative action upon and with each other, in the great economy of nature, so as to be distinctly understood by our readers, and to avoid, if possible, any misconception of our views.

It becomes, therefore, our imperative duty to claim for our new theory the foregoing highly important positions, which no other views of the condition of the human body has ever presented, namely, in reference to a fluid physiology, as contradistinguished from any other, by the most satisfactory elucidations of the nutritive, electrical, and chemical virtues in the fluids of the several circulating mediums of the body, in the complicated arrangement of all its parts, in reference to the very peculiar and interesting relation that the alkalies and acids bear to each other in the process of organization and replenishment, constantly transpiring in structure ; in regard also to the chemical action which the fluids have upon or with each other, in the increase and diminution of their temperature, which may occur in the several laboratories of the system ; as well as in regard to the prevention and cure of disease, by the introduction of nutritive fluids through the circulating mediums, acting as restorative agents upon the several organs and upon the organism—positions based upon well-authenticated experiments, facts, and chemical illustrations, which must address themselves most conclusively and irrefragably to the intelligent and scientific mind.

We are satisfied that our new theory, while it sheds new light upon the cause and existence of disease, must necessarily present to our consideration a more congenial mode of treat-

ment for its prevention, palliation, and cure, and result in that general reduction of the very painful and dangerous practice employed by the monopoly of medical practitioners of our day.

In continuation of our subject comprising the existence of the "true organic alkali," and the actual presence of acids as above noticed, we once more call the attention of the reader, and affirm emphatically that the alkalies and acids are necessary to the maintenance of living animal organization in every climate; that if one or the other should cease to exist, the result, in either case, would prove fatal to the life of the human body; for instance, should the alkaline properties in the living deposits (as "in the blood a current of dissolved alkalies is carried through the whole mass of the body, and especially through the substance of the muscles") cease to exist as such, a predominance of acid, and therefore putrefaction, under the high temperature of the system, would be the unavoidable result. Should the acid properties in the wasting tissues and fluids cease to exist as such, the alkalies would no longer generate by their action with such acid, electrical currents, as nutritive and vitalizing elements to the nerves and brain, and a general paralysis would be the immediate result.

The learned Baron Liebig observes, upon this subject, that, "The blood-vessels and lymphatics contain an alkaline fluid, while the surrounding *fluid*, that of the flesh, is *acid*; the tissue of which these vessels are composed is *permeable* for one or the other of these fluids. Here, then, are two conditions favorable to the production of an electrical current; and it is far from improbable that such currents take a share in the vital processes." We not only claim that the alkalies and acids exist in this relation to each other throughout the whole organism and its laboratories, but that they also generate at every moment of time and at every point, electrical currents; and that these electrical currents exist everywhere amidst the nervous tissues; and that they are taken up, and become nutriment to the vital properties of the nervous fluids in the brain, spine, and their distributories, which becomes a necessary aliment to their vitalization, and the adjustment also of their sensitive virtues and of their functional and motor power.

We have no doubt that the neutralization of these acids, at

such points, prevent the second stage of chemical change ; and, in the normal condition of the body, they are conducted to their outlets without affecting any irritation or disease on account of their presence ; but, in the absence of the alkali, and its neutralizing effect, a putrescent stage would supervene, and if putrescent matter should be returned through the mediums, it would become, in all cases, a source of disease to the body.

Considering the fact of the existence of the alkalies and acids established, as well by the scientific researches of the chemist, as by observation, analysis, and experiment, we are permitted to enter more fully into the illustrations of this combined action, when all doubt is removed, and the necessary effects, in the economy of nature, are confirmed.

Now, at all the points at which the wasting tissues are dying and dissolving, *acids* exist at every moment of time, and are being neutralized by the *alkalies*, and thereby removed ; and they are reproduced at each moment of time, by the constantly acidized fluids and tissues, which are the result of the death of the living tissue ; there must necessarily be a constant demand of alkalies from the blood to keep up this neutralization of the *acids*, as they appear and are being removed at each moment of time.

When a perfect alkaline condition of the circulating mediums exists, and the muscles are also charged with the same, the alkalies prevail over the acids. This constitutes the normal condition of the human body, all other fluids being equal in the whole organism.

In this condition of the human body, when the evacuator process is regularly sustained at all the outlets, its waste matter, notwithstanding it is actually under chemical change, possesses no power to disease the system, and is passed out as it accumulates. The alkalies subdue its diseased action upon the living parts, protecting and preserving the parts until the acids are fully expelled. This process is progressive, and always transpiring throughout the organs and organism at each moment of time, as long as a perfect normal condition is maintained. The acids predominate as soon as disease commences.

The learned Baron Liebig comes to this highly satisfactory conclusion, after instituting his experiments, and demonstra-

ting their truth. "From this," he observes, "it is plain, that the organic *acids* present in the juice of the flesh, the lactic and inosinic acids, &c., taken together are not sufficient in quantity to form *neutral salts* with the *alkalies* contained in its potash and kreatinine"—kreatinine being the name given by the learned chemist to his "true organic alkali."

The reader becomes at once convinced that acids exist in the form of lactic acid, inosinic acid, phosphoric acid, and carbonic acid, &c., but that they do not exist in such quantity when all put together in the "juices of the flesh," as to overpower the alkalies of the blood. It therefore confirms the fact already noticed and claimed, that an alkaline reaction preponderates, and the views we entertain are alike correct and conclusive in this particular. Many quotations might be made to sustain the idea that *alkalies* and *acids* are constantly present, acting and reacting on each other in the human blood and juices of the flesh in every living body, for which the general reader is referred to "Researches on the Chemistry of Food, and the Motion of the juices of the Animal Body, by Justus Liebig, Professor of Chemistry." But the new theory of fluid physiology alone accounts for, and clearly explains the manner and cause of their existence. The fact of their existence is one important discovery, detected and known by the properties they possess. But the cause and manner of their existence in the living body is claimed by the author of the new theory, and its illustration is confirmatory of its truth.

The important result which the foregoing reasoning has unfolded to the mind of the intelligent reader, is that of the generation of electrical currents in every part of the organism. The two general classes of matter, which we have distinctively and clearly represented and contradistinguished from each other, are the respective sources of the *alkalies* and the *acids*—the one existing under physiological law, and the other under chemical law; the one being that of living organization, and the other that of decomposition and decay. From these two distinct classes of matter, by the action of their *alkalies* and *acids*, a third class of matter claims its existence, which is that of electrical currents, or electricity. We have already stated the fact of electrical currents being received by inhalation of

the atmosphere in the lungs and on the surface, acting alike in their tubular and cellular structure, and in that relation, and at those points, communicating to the nervous tissues of their separate mediums, which are constantly absorbing and taking up this vitalizing and invigorating substance. Thus electricity is constantly imparting new forces, at each moment of time, to the brain, as it is constantly using and disposing of its vital force. But another important question propounds itself to the mind of the intelligent inquirer after truth—Are there any other points within the organism and its organs where electrical currents are generated, and what is the process of their development? We answer in the affirmative, that there are other points at which their development can be traced and distinctly and consistently accounted for; that they all administer, at each moment of time, a nutriment to vitality in the nervo-electric circulation and its laboratory, the brain; from which the motor and sensitive properties emanate, being the fountain of the vital forces of the whole organization, in its sensitive, functional, and physical manifestations. It becomes alike conclusive to the intelligent and rational mind, that the points where the alkalies and acids meet, which have been already elucidated, in their union at such points as the commingling of the alkalies and acids transpire, electrical currents are evolved and set free; that they are adapted in the same manner to the development of the vital process, as that which is absorbed and taken up by the nerves in the cellular structure of the lungs and surface. We are now left to inquire, what is the process of their development?

In order that our views may not be misconstrued or misapprehended, we are again called to use the significant language of the able and learned chemist, Leibig, when he observes, that "The blood-vessels and muscles contain an *alkaline* fluid; while the surrounding fluid, that of the flesh, is *acid*; the tissue of which these vessels are composed is permeable for one or the other of these fluids. Here, then, is two conditions favorable to the production of an electrical current; and it is far from *improbable* that such currents take such a share in the vital processes." Admitting this to be the fact, which the results of our reasoning on the subject will tend more fully to confirm,

we would observe, that the nerves of the human body existing as the mediums of sensation, functional energy, and vital force, involving the brain, spinal cord, and their united distributories, permeate every part of the system and its laboratories, and consequently must exist amidst the blood-vessels and substance of the muscles, through which the currents of dissolved alkalies are constantly carried. You will therefore perceive that the nerves exist in the immediate vicinity of the dissolved alkalies. The circulating mediums, with their substance and combustion, as well as alkaline properties, make the new-born deposit, just as the wasting tissues and fluids expire and dissolve into *acid*, at each moment of time under chemical law (the first stage of decomposition being that of *acid*), a neutralization transpires in the union of the acid and alkaline matter at each moment, and thereby the new-born deposit is shielded from the action of the *acid*, and electricity is evolved vitalizing the deposit, and adding it to the mass of living matter at a million points at the same moment of time. Here, substance from fluid matter is deposited, heat from oxygen and carbon is evolved, and electricity is imparted, giving it sensation, when the nervous tissues are receiving in their circulating mediums a constant current of electricity to the brain, through which medium sensitive manifestations are made to the mind.

The new theory claims that as the brain exhausts its vital forces, being the laboratory of power, the electrical currents at each moment of time replenish it from the million points at which it is generated. Progressive vitality is, therefore, dependent upon the union of the alkalies and acids for the manifestation of life. From the nature of this imponderable substance, electrical currents are transmitted by the brain, as quick as thought, to any given point of the organism, as the sensitive, functional and physical forces demand.

Our subject, we inform the reader, is by no means exhausted. Other ideas may be unfolded, in connection with those already expressed, which our limits prevent us from advancing.

The nutritive principle claims electrical currents as nutritive elements to that higher order of organic matter, the brain, sustaining the laws of fluid physiology.

Light and heat from the sun engendered in the atmosphere, possess a power in the nutritive process, and by its temperature rarifies and prepares, as it were, the electrical currents for their increased or limited effect on the tissues of the nervo-electric circulation; which at once becomes the medium of increasing the strength and vigor of the living body. When light and heat are withheld, the animal body, enjoying every other comparative advantage, loses its vital forces, and becomes enfeebled; so that light and heat, we are prepared to affirm, are also nutritive in their action; for they absolutely add to the support and progressive development of vitality in the whole organism.

Our new theory claims, that by the nutritive principle, elements of substance,—carbon, caloric, oxygen, and combustion, light, heat, and electricity,—minister to the life, and sustain the normal condition of the human body, through the circulating mediums, of which we have given but an outline in this dissertation; so that we are at all times dependent upon nutritive elements to sustain the organization, and to unfold the mysterious manifestations of life, from helpless infancy, youth and manhood, until the weight of many years proclaim that “it is finished,” and the work is done.

In further illustration of our views in relation to the preservative properties of the organic alkalies in the human blood and circulating mediums of the body, we would claim, for its preservative properties, a power of resistance against the irritating and corrosive properties of acids, as they accumulate on the mucous coats of the stomach, bowels, and all the other laboratories of the system under its natural high temperature. In the several degrees of temperature which the atmosphere assumes at the equator and the poles, and in all the intermediate climates, by the increased and diminished heat of the sun, in the rarified or condensed state of the atmosphere, the alkaline properties of the blood are increased and diminished in such a degree as to exert their preservative effects on the human organization, just as the condition of the atmosphere requires, wherever the normal condition of the system prevails. They also suspend and prevent the action of acids on the living tissues and membranes, cleansing their surfaces in every part of organism; increasing or diminishing the amount of electrical

current according to the greater or lesser degree of vitality required by the climate, in resisting alike the effects of a cold or a heated atmosphere, sustaining thereby the same temperature of the body in every part of the globe.

We would also refer to the highly important office which alkali is required to perform, as a solvent, in the process of digestion in the human stomach and bowels. Our theory claims the existence of gastric juice, bile, and pancreatic fluids in the fluids of the circulating mediums, and that they constantly aid in the true development of the digestive powers, exuding in a greater or lesser degree, as the properties and qualities of the food demand for its perfect conversion into nutritive elements for distribution. There can be but little doubt that the alkalies constitute one of the most prolific sources from which the three digestive fluids derive their peculiar virtues. The compound material forming the three digestive fluids, claim from the circulating mediums their due proportion of alkalies, as solvents, with such matter, under the high temperature of the body, as will aid them in carrying out their functional powers. It becomes, also, more than improbable that, when perspiration is superinduced by exercise in the healthy body, when the porous surface is found free from dead albuminous matter, and every pore and cell are alike performing their respiratory functions, that the whole surface is kept comparatively clean by the exudation, with the perspiration, of this alkaline solvent. We, therefore, consider the alkaline condition of the fluids of the greatest importance to the health of the body. The three digestive fluids are alike resuscitated as they exhaust, by being renewed at their several points by the alkaline fluids of the circulating mediums, with such other matter as form their several component parts, in the normal condition; and the temperature of the body aids much in their healthy development. We are of the opinion, that nature seldom presents a condition of the human body, either in health or in sickness, where this matter exists as superabundant; for in the organic alkalies reside all that power over acid and putrescent matter in the great economy of nature, and they may be considered that quality of the fluids of the circulating mediums that ensures their preservation against the high temperature of the body.

It is evident that the whole system and its laboratories constantly demand nutriment from food—that it is received for absolute distribution—that this nutriment must contain substance for the formation of every part of the organism—fluids for the lubrication of all its membranes and sockets, caloric or combusive elements for the equalizing of its temperature, and an organic alkali for its preservation, and the production of electrical currents, vitalizing at each moment of time each deposit. This organic alkali is united with all the fluids throughout the circulating mediums, in and through all the muscles alike, to preserve and protect the living body and its parts from the action, at each moment of time, of its acidized and constantly decomposing tissues and fluids, which at each moment exhaust, lose their vitality, and dissolve into acid and waste matter.

This waste matter is constantly being renewed, with acids, at each moment of time, as the tissue and fluids are constantly expiring and dissolving, as long as the body exists. This acid, therefore, demands, at each moment of time, the neutralizing and separating effects of the alkali pouring forth at a million points, with its substance to replenish, its combustion to warm, its fluids to lubricate, and its alkalies to vitalize, emanating all from the extremities of the finer tubular structure of the circulating mediums into cells, in such a manner as constantly to replace, at each moment of time, a new substance, as it exhausts, new caloric as it cools, new fluid as it evaporates, and new alkalies as they are used to neutralize the acids, as they constantly reappear at each moment of time, at once to separate them from the living tissue, and to deposit and vitalize the new-born atom with the evolving electrical current; to prevent, also, the absorption of that acid, by the returning circulating mediums, at which point they necessarily assume the form of waste matter, increasing in decomposition, until the evacuator process expels them through their several outlets from the living body.

We have but little doubt that the position we have claimed is critically correct, in reference to the alkalies and acids in the human circulation, and the juices of the flesh. That the one exists under physiological, and the other under chemical law; that the one preserves the living, organized matter in the

whole mass of the body and its organs; that the other is the dissolving, expiring matter, being the decomposition of the body and its organs; that physiological law, with its alkali, &c., neutralizes and expels the acid which chemical law at each moment of time engenders and procures; that the waste matter is constantly making room and creating a demand for the new deposits; that this process of waste and replenishment is constantly at each moment of time transpiring, as long as the system endures. Our progressive existence in the normal condition, is dependent upon this constant motion, as well as constant change of the living fluids, and substance of the body. The juices of the flesh, being waste matter, are separated from the vital fibres of the living body, and therefore ought not to be classed with matter which constitute its organization and vitality, but with that which exists under chemical law, deprived of the properties of nutriment or vitalization.

Under the system of reasoning that the subject involves, we are convinced that *acids* do not possess any virtue as nutriment or vitality to the body, but in the event of their retention beyond the proper period of their expulsion from the organs and organism, they must prevent health, suspend the depositing process, obstruct organization in the replacing of matter, and consequently lessen the weight of the body, and suspend the demand for food; and, in the event of their being distributed under a continuous and increasing tendency to decomposition, heated by the temperature of the body, they result in putrefaction, and become, through the circulating mediums, the fruitful source of disease in every climate.

But we must consider that, in the great and beautiful economy of nature, the *acids* are so far neutralized by the action of the alkalies on their way out of the system, as to prevent them, in the normal condition, from injuring the system in any manner; but they never can be employed by the system for organization, being entirely destitute of nutritive aliment, possessing virtually an opposite property—that of a destructive poison—to organized living bodies.

We must present a few more remarks on the relative action of the alkaline fluids in the circulating mediums, and then we shall discuss another point. As the *alkalies* and *acids* neces-

sarily stand in contradistinction to each other in their properties, we claim an extension of our views, more particularly in regard to the comparative reduction of the alkaline properties of the blood, from the increase of the *acids* affecting the normal or healthy condition of the body. In the event of the properties of the alkalies being reduced, lessening one-fourth of the power they possess to neutralize the prevailing *acids*, the result would be a change in the health of the organism in the same ratio. One-fourth of the acids, in their virtues, would remain unneutralized; resulting, of course, in a loss of healthful action on the side of physiological law, organization, and vitality, and in a *gain* on the side of disease, and chemical law, acidity and decomposition, and loss of vital action. Hence the result would be abnormal to the whole mass of the body and its organs. And in the event that one-half of the normal quantity and quality of the properties of the alkalies in the circulating mediums and muscles were reduced, health and the action of physiological law must surrender their vitalizing powers in that ratio. The gain and increase of chemical action on decomposing tissues, &c., must prejudice the health of the body and its organs in the ratio of the presence of acids, and vitiated and putrefying matter, which is uncontrolled by the preserving and neutralizing effects of the alkalies.

Now, in relation to the reduction of the alkalies in the circulating mediums, we remark, that the more the system is embarrassed, the more disease prevails from the increased decomposition of the tissues and fluids taken from the living organized matter of the body—rendering the solvents neutral in the digestive fluids, and consequently the acids predominate in their diversified grades of irritable, corrosive, caustic, and poisonous effects in all the several fluids of the circulating mediums, in the multiform changes of temperature, combusive, fermenting, and heating action which they must assume under such a progressive, chemically-decomposing, and putrefying change, throughout the whole mass of the body and muscles, and in every organ and laboratory of the human structure. This condition of the system constitutes the idea of disease as explanatory of the principles of our new theory of fluid physiology and the vitiating action under chemical law.

And still we extend our position further. In the event of the actual absence of any alkaline properties whatever in the circulating mediums, muscles, and organs, chemical change, under the high temperature of the body, with its carbon, oxygen, sulphur, iron, nitrogen, hydrogen, &c., &c., would have its unlimited sway unimpeded by any resisting agent, and would necessarily result in decomposition at every point in the organism, at the same moment of time, being aided in this result by the compound material of the body in death.

The different acids, their several peculiar characteristics, as they exist in a higher or lower degree from the medium point that unfolds their acidity, all tend and contribute to destroy the amount of *the current of dissolved alkalies that is carried through the whole mass of the body, and especially through the substance of the muscles*; and in this action they are necessarily contradistinguished from all the nutritive elements of the circulating mediums of the body, and the vital processes in its organization, and must of course prove fatal to its normal existence.

The reader will, doubtless, be ready to inquire where do these acids exist, and what constitutes that existence in the organism? In the answer to this question it becomes very important that the common reader should receive the idea distinctly. We will now, therefore, attempt to place it within the reach of his comprehension. It must be understood that this condition of the human body is that alone to which our remarks are applicable.

We shall first refer to those portions of the system in which, in its normal state, the acids cannot exist; and then we shall be prepared to draw a distinct idea of the relation and position they sustain to the living body. Baron Liebig states emphatically that, "*in the blood a current of dissolved alkalies is carried through the whole mass of the body, and especially through the substance of the muscles.*" It is evident that acids therefore do not exist in this current of dissolved alkalies, which comprise the fluids of the circulating mediums, and especially those of the muscles. He observes further, "*while the fluid, which is in contact with the external part of the blood-vessels, retains an acid reaction.*" You will now per-

ceive, from the language used, that the acids exist outside of the circulating mediums, and outside or between the muscles, or in their sheaths, interwoven with the finer extremities of the circulating mediums. The *acids* must therefore exist, and their locality may be inferred to be, at every point in the organs and organism which is outside of the blood-vessels and muscles, and they must necessarily exist, more or less, everywhere, except where those organs are. A cellular structure exists, the cells of which are, as above stated, all charged with *alkalies*. Now, the learned chemist says again, "*we perceive that a CAUSE must necessarily be in ACTION at these points.*" What does he mean by these points between the alkalies and acids? He says, "A CAUSE must necessarily be in ACTION THERE, *which prevents the removal of the free acids,*" or, "*if they are removed, reproduces them at each moment of time.*" We perceive that the mind of the Baron labored to present a very nice discrimination of the points of action. He thought and wrote clearly on the subject; he does not, however, give us to understand the cause, but observes, "*a CAUSE must necessarily be in ACTION.*" We are permitted distinctively and clearly to assign THE CAUSE, and the ACTION, and what transpires at *these points*. Our new theory represents *acids* constantly appearing, meeting the alkalies, and thereby disappearing, by their neutralizing effect, at each moment of time, evolving electrical currents, as before stated, in precise accordance with the language of the chemist, "*that they are removed and reproduced at each moment of time.*" This action results from the constant transmutation of the tissues into *acids*, and the constant necessity of their neutralization in the normal condition of the system. The wasting tissues, under chemical law, constitute the existence of *acids* as the result of decomposition.

It may be here elucidated in the language of the Baron, in a continuation of his affirmations, "*That the blood-vessels and lymphatics contain an ALKALINE fluid; while the SURROUNDING FLUID, that of the flesh, is acid,*" &c.—Here he plainly designates two classes of matter—the one, "the fluids of the blood-vessels;" the other, "the fluids of the flesh"—and lays down their distinctive characters, which, from research and analysis, he has claimed, because he actually found them. We concur

in the same idea, only that we illustrate and explain the precise causes of their continuous existence under the two laws which give a comparative clearness to our explanation. We have, therefore, clearly accounted for that which was barely shadowed forth on the chemist's mind, and supposed to be in action.

Perhaps there is no chemist that has ever written on the properties and qualities of the constituent parts of the human body, the currents of the blood, and the juices of the flesh, who has more clearly and learnedly discussed the subject of his experiments, and the efforts and results of his discoveries, than Justus Leibig—faithful, diligent, discriminating, and exceedingly cautious before he gives that conclusive evidence of the absolute truthfulness of his discoveries. But when he enumerates the *acids*, and elucidates their peculiar properties, (having obtained all these facts from the animal body after death, and the juices of the dead flesh,) he has ascribed the existence of acids to belong to the organization of the living body, as the result of life or living organized fluids. But our new theory represents them as the result of that necessary decomposition and wasting, that must, at each moment, transpire in the living body, in order that organization should progress. The acids, therefore, cannot be considered as component parts of the living body; for they have been dissolved into that state as the result of the exhaustion and death of the tissues, which is, at every moment of time, transpiring in the living body, in its normal condition. The two distinct laws that we have represented serve as a guide to our conclusions, which enable us at once to give those definite views, which, we trust, are founded alone in the truthfulness of science, confirmed by the most positive demonstration of facts.

We have harmonized the existence of the two distinct laws, as acting simultaneously in the great economy of nature, in the progressive disorganization and replenishment of the body, in all its component parts. We have illustrated their distinctive relation to each other, as they relieve the system from the results of their union, by expelling the acids and decomposing elements from the body—impressing the mind of every reader with an exalted idea of the infinite wisdom and power of that

God who is the author of this wonderful and complicated structure, stamping it at once with a faint impress of his own likeness, by endowing it with mind.

PART FOURTH.

FLUID PHYSIOLOGY.

The New Theory embraces the Origin, Cause, Progress, and Cure of Disease—It claims a new Position—Depository Process a new Process of Restoration—Resisting Disease—Its Origin in the conflict of Chemical and Physiological Forces—New Treatment—Scientific Treatment, falsely so called—Dreadful Devastation—Allopathic School—Remedial Agents of New Theory—Restorative Process sustained during Disease—New Theory establishes Confidence—Nutrition in every Disease, and in every Stage—Nutritive Fluids—Nature's Law—Science Compelling the System to Consume Itself—Starving Process—Depletion by Medication, by Loss of Blood—Death—New Theory prevents Vacuums—Good Matter Retained—Foul Matter Expelled—Soup Injurious—Increase of Blood by Nutritive Fluids, in Fevers—No Poisons in Medicine, but Restoratives—Selection from *Materia Medica*—Toning—Twelve Nutritive Fluids—The Allopathic, Homœopathic, and Hydropathic Practices considered.

IN introducing this part of our subject to the consideration of the reader, it must be remembered that we have nothing whatever to condemn, in the progressive researches which have been made by the learned physiologists and chemists of the age in which we live. Their very high standing, as scholars of eminence, with the advantage of the European schools, places them at once in that relation to the world in which they must ever be acknowledged as men of liberal acquirements and profound science.

To scientific works emanating from such a class, who are alone controlled by experiment, demonstration and fact, we are indebted for the development of those peculiar properties of animal and vegetable matter upon which the basis of our new theory rests; being sustained, also, by every other scientific auxiliary which the nature of our subject would necessarily call to our aid, in a work of this peculiar character.

The arrangement of our subject, and the mode of presenting our views of the new theory of the origin, cause, progress, and

cure of disease in the human body, under the influence of chemical law, are based upon a principle which has never yet been developed and explained, or even presented to a deserving public.

We are also aware that we stand in the scientific world alone, in relation to the science of fluid physiology, based upon the chemical properties of the fluids of all the circulating mediums of the body. We at once consider the manner in which they are generated, and the material out of which they are constituted. They must necessarily sustain such chemical relation to each other as virtually to establish a law for their action, in the development of the organization of the body, its sensitive and functional, its physical and vital forces.

In this part of our exposition of the science of fluid physiology, and the nutritive principle in connection with the alkaline fluids of the circulating mediums, it becomes important to refer particularly to the depository process under the action of disease. Our new theory claims a position which a train of well-directed experiments have so fully and satisfactorily confirmed, as to render the subject worthy of the highest consideration to the afflicted. This may seem to be strong language when applied so generally to all diseases; it may be looked upon with suspicion and distrust, and the inquiry may arise in the minds of many, whether it is not a blind delusion, or a fanciful theory, designed but to awaken false hopes to suffering humanity, and add another cloud to the already mysterious and impenetrable darkness which prevails over the common mind, in reference to the means which have been resorted to in every age to restore the suffering body to the influences of a healthful and salutary condition. In the calmness of a sober self-assurance, with a true knowledge of the sources of disease in the human system, we claim the *discovery* of a new process of restorative action, based upon nature's immutable laws, cherished and sustained by those nutritive and congenial elements which administer to the native energies of the living body, and clothe it at every moment of time with a principle of resistance against the fatal encroachments of disease—a principle which it is the province of the vital forces to exercise, even when comparatively unaided by those nutritive

elements. We affirm that nutrition is the sustaining and replenishing principle of the living fluids of the human body ; and that it furnishes a resistance necessary alike to palliate and remove the effects of disease, and to assuage, soothe, and invigorate the organism in the great conflict of the vital fluids with the rapidly decomposing and vitiated portions of the system.

We consider that disease originates, in all instances, in that change of the relative position of the chemical and physiological forces,—in the loss of that balance of power and harmony of action which they assume towards each other in sustaining the evaculatory and replenishing processes which are always active in the normal condition of the body. When the natural laws of the system have lost their control over chemically-changing matter which is retained in the system, the great struggle of the two opposing forces takes place, while both seem to claim the ascendancy in the contest—the one seeking to sustain the principles of life and organization, the other to promote the work of desolation, in the complicated energies of the human body. This warfare is presented comparatively in a thousand forms of action in the diversified diseases to which the system is subject, and in every instance the same result is sought by the antagonistical forces and fluids, until the one or the other triumphs; and the result is either the expulsion of disease, or the loss of life. The several struggles and contests of the two parties, in their excitement and confusion in the commingling of the elements of life and death presented in the two general classes of matter, elucidated in another part of this work, represent to the mind of the reader the raging or silent process of the laws of disease,—the fatal or triumphant result.

In the application of remedies, we shall consider the action of two classes of agents. The one class are all nutritive, restorative, cleansing, healing and life-sustaining in their action upon the system, whose native resisting impulses demand aid and relief, nutritive substance and combustion, to keep up her living fires, and to clothe her living energies with power. They are also antidepletive, cooling, soothing and invigorating in their primary, intermediate, and final action. They are all medicinal in their nature, and vegetable in their character,

prepared by the hand of God, the great Chemist and Physiologist, the Creator of the body, planted in nature's wide-spread garden, untilled by man,—in the forests and in the fields, on the hills and in the valleys of every land. They are all destined to sustain the physiological laws of the organism in their effort to sustain the body, and to overcome and expel disease in every climate. The other class of agents are false and futile, exciting and irritating; they are chemically prepared by men's device, ripe with wisdom! reaching far beyond nature's laws! in the use of corrosive poisons, depletive and highly condensed mineral medicines, with a dark and cruel—with a painful and blasting—depletion and reduction by bleeding and starvation, acting with the chemical laws in direct and positive antagonism to the living body, and its progressive existence. This is scientific treatment, falsely so called, which claims the actual generation of disease, in order that disease may be cured. This strange and fatal delusion has blinded the world, and dugged the graves of thousands in every country, and laid their bodies, by the madness and delusion of a false science, in the silence of the dust. It has caused many to linger in anguish and suffering, as living monuments of the cruelty of a boasted malpractice. This fatal, this strange delusion seems to be established in the world, as by the King of Terrors, to bring woes and sorrows, tears and anguish to the widowed wife, to the blooming daughter, to the aspiring son; to clothe in the habiliments of mourning the youthful group, who once looked with a cheering hope to a father's heart, a father's hand, and a father's smile. How often are these hopes of growing years swept away by the savage lancet, or poisoned by the ulcer-procuring mineral or deadly opiate. The blood of thousands calls aloud from the earth for some new light to break upon that protracted darkness; some soothing, healing, cooling, invigorating and life-inspiring treatment, some harbinger of commiseration to the struggling man, when sinking upon a sick bed, some nutritive element, instead of the fatal dose or that gradual starvation which are so wantonly prescribed by the votaries of a false and delusive science.

In this section of our work we shall give a full exposition of our treatment, and we trust it will meet the minds of all with

such a conviction of its harmony with nature's laws, as to commend itself to an universal practical consideration.

The eminent friends of the allopathic school, with their endless experiments, have neither defined the cause of disease, nor agreed upon their ever-varying mode of treatment. They live yet in the field of blind experiment, changing as the ever-varying symptoms dictate—judging from the effects of disease, rather than their causes, and from the results of unauthorized experiments of trying this, and that, and the other agent or application, until they are bewildered and lost in the wild maze of *scientific* speculation, alike upon the treatment and cause of disease.

But in our new theory of fluid physiology, in the chemically-defined properties of the fluids of the circulating mediums, in their deposit of the nutritive elements, we claim to have discovered the causes of disease in the human system, established by the laws by which its progressive existence is maintained. We would observe, in offering an argument here for especial consideration, that during the continuous and timely evacuations from all the outlets of the human body, in its normal condition, the natural laws of the system are, at each moment of time, renewing the wasting fluids and exhausting fibres of the structure, and that the nutritive principle, under physiological law, constantly aids her in making her nutritive deposits for support and replenishment. Under this evaculatory and expelling process, in the great economy of nature, this fact is established.

Now, when it becomes necessary to employ agents or medication to cause the system to expel and evacuate matter which has become antagonistical to its healthful condition, we would ask, why should it not be consistent for the system to carry on its process of restorative and nutritive deposit, while such matter is being removed at a million of points? We institute a positive affirmation, and claim, under the Nutritive principle, that it is the province of the natural and functional laws of the organism to do so—that they will invariably do so, from the very fact, that it is the only mode by which the system has ever exerted its restorative influence, and that the Nutritive principle calls for nutritive elements and fluids

adapted to the restoration of the system under disease. By thus sustaining the known physiological laws of the organism, we at once prevent its premature decay. The nutritive principle, therefore, claims and develops a law, a mode, and a source from which the new theory is bound to secure the confidence of an enlightened public, for it establishes the absolute manner by which a healthy condition is superinduced, by depositing in the place of the diseased matter expelled from the several outlets a new matter that is in fact, pure and nutritive, congenial and salutary, to the wasting body, exchanging at the same moment of time, the morbid matter for a healthy material. We assert the fact, that this process is going on in the system, at every moment of time, in the normal state ; and we say that the same process can, and will be carried on, while under disease, if proper soothing and congenial elements of nutrition are administered for that purpose. Nature, in self-defence, with the action of the surrounding atmosphere, seeks nutritive elements to supply the complicated demands of the system ; and if reason or common sense does not dictate or propose a supply, she will consume her own blood, and adapt *it* to the supply of her machinery as long as it lasts. This we assert, and we are prepared to furnish " nutritive fluids " which can be introduced into the human stomach in every form of disease, and which the human stomach will retain and appropriate through her circulating mediums to accomplish this important end. Thus, according to the new theory, the science of nature, and not that of the medical faculty, becomes our guide in the selection of restorative agents, and enables us to triumph over disease and premature decay. We would here observe, that this is not the mere assertion of this fact that makes it truthful and consistent ; but it is because chemistry and physiology, and their existing demonstrative laws, establish it.

It must always be remembered that, when the system is brought under disease by the retention (be it gradual or rapid) of the acids and morbid matter, the removal of such morbid matter becomes necessary ; and that, when agents or applications are resorted to for depleting and reducing the whole body, and draining the living fluids from the circulating mediums,

such a course cannot result in anything but injury, depriving the system of its own power of resistance, its native energies, by sapping the constitutional powers of the organism. But the simple and harmonious idea of the New Theory is that of sustaining the vital forces by means of nutritive fluids cooling, soothing, healing to the stomach and bowels while under disease, administered in the form of fluids, diluting the vitiated matter, and by constantly applying frequent drinks, to act upon inflamed surfaces in such a manner as to arrest and assuage pain, soreness, and distress, to become the medium by which glutinous, morbid, and fetid matter is floated off, aiding thereby the soothing and active agents in cleansing the stomach and bowels; thus granting to nature under evacuator process, nutriment, and strength derived from such elements, which are readily absorbed and taken into the circulating mediums, cooling their heated fluids, and giving comparative vigor to the laws of life.

It is painful to contemplate the common treatment offered in all diseases, which is to procure evacuator matter from the patient by irritations, depending alone upon highly concentrated medicine, powerful in its operation, to compel the system to act, and at the same time leaving the organs barren of any fluids and nutritive elements, to form a consistent evacuator matter; so that the medicinal agents act upon the bare coats of the stomach and bowels, engendering acute pain, inflammation and disease, impeding, rather than promoting its own action. Both in the case of the infant and the adult, this dreadful treatment is resorted to under the name of science: added to this is the absolute refusal of fluids and food, and the body is thus compelled to consume itself to furnish material to evacuate. Starvation is added to this disease-procuring process, by which the struggling and pang-stricken body is hurried to a premature grave.

In some instances, when the system is surcharged with drugs, the resisting influences of a good constitution struggle through months of lingering weakness, the organs of the body being prostrated by the agents employed, and the loss of blood. But in most cases the natural laws reassume their action, which is derived alone from nutritive and congenial elements. In all

such cases, the timely aid of nutritive elements alone can prevent the rapid and premature dissolution of the body. The New Theory claims that, during the whole process of disease, nutritive fluids may be constantly and freely administered, and that during such administration, the system is aided in resisting and overpowering disease, and at once preventing the emaciation of the body.

In the evaculatory process, either from the surface, kidneys, or bowels, vacuums are constantly being created in the organs of the human body, while under disease, and the action of medicine. These vacuums necessarily draw to the points where they exist, the fluids from the finer tubular structure of the circulating mediums, to fill the parts just made vacant by the evacuation. As no elements are derived from any other source, this process must necessarily sap the fluids from the body, reduce the power of the organs to procure them, and thereby drain the system of its substance, its combustion, and its vitality. This process is a science, under the reducing and depletive system of treatment, to which is added the absence of fluid food, or nutriment. This is the wisdom of the age.

The New Theory proposes, under all circumstances, to fill the vacuums as they are produced with nutritive fluids; not only thereby to prevent the surrounding circulating mediums from furnishing the vital juices to sustain the evaculatory process, but to nourish the system, and at once to soothe and heal, cool, distend, and replenish the parts, and to enable the evaculatory process to be carried on under the restorative, rather than the depletive action of the system.

To all persons who may desire to prove the facts satisfactorily to their own minds, we would here offer an explanation of the action of the nutritive fluids within the diseased system, while under medication. When given freely, the absorbent vessels of the organs rapidly absorb and take up the fluids, as they claim an affinity to such portions of the system as are not under the immediate action of disease, furnishing the living circulating mediums with healthy matter to carry on the process of deposit. As these deposits are being made at every moment of time, at a million points within the limits of the system, the waste and vitiated matter is urged on to their several out-

lets. Hence, the nutritive fluids are retained and the diseased and vitiated matter is expelled in the evaculatory process, maintaining the same natural law in the system that is manifested in a different ratio, in the physiological powers of the organism in the normal condition of the body.

It will be found that when large quantities of the fluids are drank under disease, the quantity of urine is not materially increased, but the evaculatory matter from the alimentary canal is thrown off in copious discharges, highly fetid and putrid, possessing nothing of the character of the fluids taken into the system; so that we are fully satisfied, by a multitude of experiments, which can be repeated and proven at any time, that, notwithstanding the evacuations procured by the use of the fluids are abundantly increased, no weakness, pain, or loss of strength, transpires; and in very many instances, almost in all, the pulse improves in volume, regularity and strength; the body gains in weight and natural and physiological power to expel, and thereby saves the system from the ravages of the morbid matter, and finally exchanges the morbid for the healthy material—expelling the one, and retaining the other—thereby sustaining the *discovery* we have made of removing and curing disease, upon the nutritive principle.

The reader is prepared, by this explanation, to perceive that an exchanging process is constantly transpiring, at each moment of time, at a million of points in the body, as a law of its organization—constantly expelling waste, and retaining the healthy matter, in the great and wonderful economy employed to sustain its progressive existence in the normal or healthy state of the body. We find that the same law is maintained in the evaculatory process procured by medication, when the system is laboring under disease; only that the nutritive fluids are required to be administered every hour, and immediately after every discharge. These are facts that must remain forever hereafter capable of demonstration in the person of every invalid, whatever disease he may be afflicted with, however acute or painful, scrofulous or humory, inflammatory or morbid. The exchanging process of morbid for healthy matter is a law of God, ordained in the creation of the animal kingdom, and must necessarily retain its force as long as the world endures.

In the many successful experiments we have made, in confirmation of our doctrine, we have learned that fluids made from animal matter, such as soup, broth, or the juices of the flesh of animals, are not congenial to the system while under disease; and when administered, seem to produce excitement as well of the nervous circulating mediums, as those of the carbonized fluids derived from the circulating mediums, going to and returning from the head and heart. You may rest satisfied of this fact; it is, and ever will be so; that particles and atoms of animal matter, when subjected to the boiling heat in their preparation, are deprived of that peculiar nutritive element which the system requires. Such animal fluids seem to require also of the system a greater amount of digestive functional action than the compound vegetable preparation of our nutritive fluids, and for some reason the animal fluids sour, and become heated and irritating. From a continuous train of experiments which have been instituted for the last seven years, we are convinced that the action of animal fluids in the state above noticed, have always tended to combine with the chemical combustion of the wasting tissues of the system; and that the natural laws cannot appropriate them to the restorative processes of the body so readily, and with such satisfactory results, as the nutritive fluids which are more of a vegetable character, and easier digested—probably possessing more of an alkaline property. It is truly remarkable to observe, (and this being a natural law of the system, it does not arise from any artificial action,) that the blood-vessel or fluids of the circulating mediums, in a very short period after the nutritive fluids are freely used, become filled and distended. The extremities show this action always under medication, and to the great surprise of the patient, the hands and feet become warm, and the vitalizing and nutritive process transpires progressively. This new practice in every climate is alike successful, and in every disease alike beneficial; for it clothes nature with its own latent powers of endurance, as well as resistance, and ministers to its vital forces and constitutional energies in a warfare against the diseases of the human body, over which it must ever claim the victory, when you furnish it with such ammunition in the *magazines of living fluids* as may at all times be

used in the conflict for life against the encroachments of disease and premature death.

In all fevers we give copious drafts of nutritive fluids every hour, with frequent and repeated ablutions of the body, and medication of a character purely vegetable, acting alike in rapid succession upon *all* the outlets of the system. Fever, under the nutritive treatment, is entirely lost in the perspiration and strength engendered by the nutritive fluids, while making their deposits under that salutary evacuator process which medication has superinduced—permitting the physiological laws to use the fluid and nutritive material in self-defence, without which action the chemical laws might secure a fatal triumph.

Among some of the last cases treated by the nutritive principle, was that of a young woman, of the age of eighteen, with a fever, being that of a bilious typhus fever, which has assumed the name of typhoid fever. The latter character predominating—delirium prevailed. The fever had raged a night and a day when we first saw her; she was attended faithfully by her mother, who administered the nutritive fluids every hour, a tumbler full, for seventy-two successive hours, when rest intervened during the night. The fluids were renewed again in the morning, and continued eight days from the time she was placed under treatment. At this time she was convalescent and comparatively well, but of a spare habit: she had increased in weight four pounds. The fact was distinctly ascertained, she having been weighed the day previous to her attack, in company with her sister. Medication and other means were of course instituted to procure a healthy condition of the system; we are, however, fully satisfied that this result could not have been procured only under the action and treatment of the New Theory.

The reader, doubtless, is anxious now to inquire what medicines are congenial and sustaining to the nutritive elements of the system. We are here required to affirm, without the slightest disposition to impose upon or misguide our readers, especially those who are seeking the return of balmy health, that we have full confidence in medication; that there is yet such a process, which may be used by man while under dis-

ease, which is both congenial and salutary in its action upon the human body.

Medicine, for the use of man, is of Divine appointment; hence, the idea of medication cannot be a delusion. If there are gifts of healing imparted in accordance with the Scripture, there must exist, from the exalted and beneficent hand of the great *Chemist* our Heavenly Father, material to be used for that purpose—created, adapted, prepared, and designed for that purpose—various and abundant, distributed wherever man exists. God possesses an infinite knowledge of their properties, which guided the design of their creation, in particular reference to their effects upon the wonderful and complicated organization of that structure which He has, in His infinite wisdom, formed and endowed with sensation and mind, capable alike of the power of enduring suffering under disease, and of applying such agents as are destined to soothe, heal, and assuage pain, and restore the exhausted energies of the living body. Under this view of the subject, we consider medication necessary, and, under our new theory of the cause of disease, nutritive, healing, and cleansing medicines, we consider alone congenial and salutary to those minute, tender, fibrous, and tissular arrangements of parts which the organic structure represents, especially in the tender and delicate state of the organism in infancy, childhood, and youth.

Vegetable medicines, whose select properties are evidently designed for the higher order of creation, man, are therefore entirely destitute of poisonous properties, and act only in accordance with, and under the direction of physiological law, cleansing, toning, cooling and invigorating to every organ of the system; inducing it to exercise its evacuation powers in accordance with its laws, without pain, without weakness or debility, but with increased strength, and the satisfactory result of immediate relief, from the fact of the system being disburdened from a load of acid and morbid material, which, under its previous weakness it was incapacitated to expel. We consider it necessary that it should be taken as pure, ripe, and fresh from the soil and climate in which it grows, as may be; preserved with care, and with as little change produced upon it as possible, by the hand of the chemist or apothecary, enough simply to preserve its true virtues

and its inherent properties from being exhausted and lost by the action of the atmosphere, so that it may be efficacious in as small quantities as possible. The great Chemist has exercised his wisdom in their formation, and the several properties which appertain to their action. We wish to avail ourselves of the properties and virtues they possess under nature's laws, sustained by nature's God, and distributed through every climate and country by His beneficent and merciful hand for the use of man. We shall ever consider that such vegetable matter as is destitute of any poisonous properties whatever, are such as have been designed for man, and no other.

To the botanist and vegetable physiologist, as well as the chemist, we can only refer for the confirmation of the fact of their great variety and abundance. The field from which we select our remedial agents is by no means contracted. The materia-medica of Britain and the continent of Europe, including those of Edinburgh, London, Dublin, Paris, and Germany, present to us the medical properties of all vegetable matter, as do the works on the same subject in the United States, together with those other works especially designed to represent the valuable medicinal properties of the native medicines of this continent. We claim from these sources—by no means limited—such vegetable matter as is considered by the schools of those countries destitute of poisonous properties, therefore our selection must necessarily be ample. But at the same time it becomes alike our province to choose, as it does to reject. We therefore reject all minerals and metals chemically changed and prepared for experimenting upon the diseased body. We consider them not only injurious, but at all times, and under all circumstances, destitute of such properties as are congenial or salutary to the living organism. We are convinced that they procure obstructions, inflammations and disease, entirely foreign to the chemical properties of the component parts of the fluids and organs of the living body, and consequently must act in direct antagonism to the natural laws of the system, necessarily engendering disease. The fact is, that the doctrine of the profession (inconsistent as it may seem to the rational and intelligent mind) is, that artificial disease must be engendered by medical action, medicines being selected for that pur-

pose, so that the natural disease may be destroyed within the system by the artificial one.

This cruel, delusive, and we may add maniacal, notion, that disease and inflammation must be superinduced by such medicines as are sufficiently poisonous to procure, engender and produce that result, so as thereby to eradicate and diffuse the other disease, so that the disease inflicted by science, by the selection and aid of such preparations and medicinal poisons as are known to be in and of themselves actually disease-procuring, poisonous and inflammatory to the living body, and organs, becomes the identical agent necessary for the destruction of disease. This is at once acknowledged to be the superlative science of the boasted medical profession of the nineteenth century. Now of these two diseases, the one engendered by the retention of that general class of matter which exists under chemical law, must be removed, as affirmed by the faculty, by the production of another action in the system by chemically-prepared caustics, irritants, opiates and minerals, as well as metals, which are designed and intended to inflame and poison, benumb, reduce, and intoxicate; so as to procure, excite, and superinduce diseased action. Thus we have the wonderful and scientific phenomenon that two diseases engendered and existing at the same time result in the actual production of health! Obviously, medicines have been prepared, selected, and adapted to the disease-procuring process—both from the vegetable, mineral, and animal kingdoms. The ulcer-procuring properties of the several mercurial preparations have obtained their reputation from this dreadful, this, we may add, death-inflicting doctrine! Now, we may observe that the new theory of fluid physiology, and the nutritive principle, from the very nature of their restorative and life-procuring properties, under the laws of organization and sustenance of the living body under disease, cannot warrant the employment of such agents. For they are selected by the allopathic school alone to engender disease; for our science is that of inducing the action of the natural laws of the system, by cleansing, toning, and healing, cooling and invigorating the suffering body, until nutriment actually becomes the leading agent in its restoration.

There may be in the *materia medica* of the world one mineral

or metallie preparation to thirty vegetable medicines. We are pleased to select from the thirty, and leave the one for the disease-procuring process. Also, there may be one vegetable poison to forty vegetable medicines destitute entirely of poisonous properties, acting congenial with the living organization. We select, once more, from the forty, and allow the science of the medical faculty to use the other to poison the system, for the purpose of engendering disease enough to destroy all the other diseases, and, after this superlative and scientific effort is actually carried out, to PRODUCE health !

- The ancient and venerable motto that has sustained this cruel and pain-procuring, this ulcer-begetting practice—in which there is wrapt up the concentrated science of ages, of erudition, and learning—is contained in this language: “*Curatio contrariorum per contraria.*”

Our new theory claims no connection with either of the vegetable, mineral, or compound poisons, or the highly condensed vegetable or mineral substances procured by the agency of chemical laws, presented in the books of medicine as very active agents in producing certain peculiar effects, alike deleterious and deadly to the vital energies of the body. Such remedial agents we have once used for eight successive years of practice. It became our duty, in the exercise of a free judgment, virtually to abandon them, for the simple reason that they produced and procured disease, suffering, and premature death. This was then, and is now, (after twenty years of experience,) our most solemn conviction, that such agents are destined forever to entail on suffering humanity the blasting mildews of death, in their secondary and most baneful effects upon the human organism.

As for all our remedial agents, in the form of vegetable medicines, we bow with reverence to nature's laws of organization, when vegetable matter is considered and proven to be employed in the construction, formation and development of a large proportion of the animal kingdom, because of its adaptation and application to the reproduction of animal bodies. Hence vegetable medicines are alike congenial to nature's laws. Nature shall be our guide. Nature uses no poisons to organize and form living bodies, to cherish and develop the new-born offspring, and for this reason—that they engender disease, and

suspend, if not destroy, both functional and physical vitality. We distinctively claim that all our medicines are nutritive, imparting virtues and functional energies to the organs of the human body, while under disease or premature decay; restorative and congenial to the body; endowed in their component parts with the *known* properties and virtues of pure blood.

We therefore give medicines of that peculiar character, that they act restoratively—medicinally; that they cleanse, tone, invigorate and revive the system, to exercise her evaculatory processes under physiological law, by her native functional energies, aided and cherished by our nutritive fluids, and other congenial and nutritive diet, which tend to increase the weight of the body, while under medication and during disease.

We consider that by the known laws of the organism, the system is absolutely bound to contribute to its own support, under all circumstances, and especially that of disease; and in the event that no food should be supplied to the organism for the very reason the system could not adapt or appropriate it to the sustenance of the body. The natural and vital laws of that organism, even under disease, will soon convince the most skeptical of its physiological powers, by converting and consuming its own blood, and its substance, in defence of its own existence. If nutriment be withheld, this physiological power will select the adipose matter and living fibre of the body; it will dissolve them by its digestive fluids; it will burn them up, by its fluid oxygen, on the altar of life, to save that very organism from perishing. Pound after pound of fat, fluid and flesh is sacrificed to preserve its organization, to prolong its existence, until the power itself exhausts in the effort. In many instances, this peculiar power of resistance, endurance and native tenacity for life, is truly wonderful. The effort made by the system itself, when absolutely compelled to dissolve and contribute the substance of the body to its own preservation, can scarcely be believed—so powerful are those latent agents of resistance against the laws of disease. We have, therefore, a reasonable and consistent theory which claims, that if the system is capable of (what is, in fact, a law of its organization) appropriating and applying nutriment from its own flesh for its sustenance, even under disease, it is far

more than probable that the body will adapt and appropriate nutritive fluids, soothing, healing and cooling to her organs, and refreshing, reviving and invigorating to the body, to arrest at once the ravages of disease, and the fatal effect of gradually progressive starvation.

We are prepared to assert, to prove, and confirm that assertion, in the person of any invalid, who may seek at our hands the restorative effects of this valuable and important discovery—that health may be restored to the normal condition by the deposits of matter congenial to the system, in accordance with its natural laws, as soon as nature can accomplish the work by her regular process or organization.

We not only venture the assertion, but we know the fact, by its confirmed practical results, that the system will receive and appropriate nutritive elements, in the form of our nutritive fluids, while under disease, by her restorative organic energies, her life-protecting powers; that it is her peculiar province to claim nutritive matter, and so to appropriate it as to sustain life even to the last extremity—until nature itself expires.

With our remedial agents we constantly administer nutritive fluids, of which we have prepared twelve in number, adapted alike to sex, age, and temperament, as well as to the character of the disease, whether it be mild or acute, virulent, malignant, simple or compound, in its development. The character of the manifestation of disease, or the form in which it presents itself, is not of so much importance as might be anticipated, so long as this fact is conclusive, that the same restorative energies of the system are alike required to overcome every form of disease, by the action of those pure nutritive elements in which are contained the properties of pure blood.

In these fluids exist the nutritive element destined to be adapted by nature's laws to supply the wastes of the sinking, prostrated and suffering body, to soothe, heal, cool, cherish, nourish and support it; when its digestive organs are so weak, as to be incapacitated to dissolve and appropriate ordinary food, we hasten to its relief with a material in the form of fluid, possessing the properties precisely of that fluid furnished the young babe, already adapted to the state of its delicate digestive organs, and its native comparative weakness. When this mate-

rial is freely administered, the system readily and rapidly appropriates it to its support, because, being in the form of fluid it is hence congenial, and it becomes in this relation a natural aliment, from the fact already noticed, that every quality of substance or matter received as food by the system, must be reduced to a thin ductile fluid form, before it can impart any sustenance or nutriment whatever to the body. This nutriment, therefore, possesses this great advantage, that it exists when introduced into the system, in the form of fluid ; we save thereby a large amount of functional labor to the organs and digestive fluids, because it partakes of the properties and elements of pure blood : the absorbent vessels readily transmit it to the circulating mediums, to supply the wasting influences of disease upon the body. When the infant receives its nutritive fluid in the form of milk, possessing all the component parts of the organism, (there is something remarkable in the review of its effects,) that it forms the muscle, bone, tendon, nerve, &c., so rapidly as to treble their own weight in the course of six months, with the development of a proportionate amount of strength and vigor. We cannot attribute this to anything else but this *fluid* form of diet, and the comparative ease with which it is converted into the elements of the living body. It must be acknowledged that the strongest systems, and the most vigorous, energetic, and enduring constitutions, receive the basis of that development from *nutritive* fluids freely and frequently given, in infancy and childhood, from the breast.

Would it, therefore, be inconsistent to suppose, or even frankly to admit, that nutritive fluids furnished very freely to comparatively weak and depressed digestive organs, (to which in fact no other matter would be congenial,) should be digested, absorbed and distributed by them, and that the body should actually gain in weight from their use, even under disease. Whether the idea be admitted or not, we affirm that it is susceptible of proof : that it is true in itself, sustained and absolutely confirmed by the laws of the organism, in the economy of nature, whenever her energies and constitutional powers are sufficiently energetic to carry out the restorative principle.

Medicine cannot form one tissue or make one fibre, or create one drop of vitalizing fluid. Medicine cannot restore or make

any nutritive and combustive deposit. No, that is not its promise ; it never has been—it never can be ; medicine cannot cure. Cure is only effected, under our exposition of facts, by the evacuator and replenishing process alone—by the exchange of morbid for healthy matter ; in accordance with our New Theory of Fluid Physiology. Nutritive elements alone can restore or supply the waste, and keep up the progressive living energies of the system, while under disease or premature decay. Medicines increase or retard the evacuator processes from the lungs, surface, kidneys, and alimentary canal, as circumstances may require, and effect the removal of the morbid and chemically-changing matter, so as to make room for the deposit of nutritive elements. By this process evidently, we resuscitate the body by fluids adapted to sustain the organism, under its comparatively inactive, weak and sickly condition.

We are amply and fully convinced that the action of medicine in superinducing the evacuator process at all the outlets of the system, and the effort made by the physiological laws of the system, are absolutely carried on in the system at the same moment of time, as an absolute and incontrovertible law of its nature. Under the foregoing distinct elucidation of the nutritive principle and fluid physiology, together with the alkaline circulation in the human blood, we assert with a full confirmation of its truth, that the new theory is consistent with the natural laws of the system ; it proposes means congenial to the development of its native energies, and salutary to the weak, sinking and dilapidated state of the organism, which will, at all times, resuscitate and revive the drooping energies of suffering man.

Perhaps there has been no error in the treatment of disease generally, which has been more injurious to the system and its organs, or more fatal in its results, and absolutely more destructive of life, than that of starvation, withholding and refusing nutriment in the form of water or other fluids and prepared nutritive elements which may be at all times administered during the diseased state of the system. Starvation adds to disease a deeper pang, a more wasting devastation ; and a consuming principle, which, if even permitted to exert the same ravages on the living body would prostrate it in death, even without

the aid of any disease whatever ; this depletive, reducing and anti-nutritive idea has existed as a very powerful auxiliary, in many instances, in procuring a premature death to thousands of suffering invalids. What must be the dreadful consumption of the body in the absence of food, when under comparative disease ! a pound of flesh consumed away in twenty-four hours, and in some instances two and three pounds in the same period ! We have known frequently sixteen pounds lost in a week ; and in two consecutive weeks nearly treble that amount. We have known a person to lose, under the depletive process, sixty-six pounds of flesh from his body, in weight, during an illness of six weeks. Strange as it may seem, the wisest and most eminent physicians are still deluded with the idea that depletion is restoration ; and loss of flesh marks the success of science !—dark delusion !

The use, therefore, of disease-procuring medicines which have been so designated in the book, to sustain the acknowledged doctrine of the Allopathic practice—that the natural disease must be removed by the production of another disease, and that the actual existence of the two diseases must result in *no disease* ; that the artificial disease made by this disease-procuring medicine, absolutely devours the other, and leaves the system free, and healthful. Bleeding, blistering, cupping, leeching, scarifying, setoning, and engendering ulcers and caustic sores, by imbedding caustic in lumps in certain portions of the body ; irritating the surfaces by the application of highly inflammatory and poisonous oils and ointment, for the purpose of procuring by these modes diseased and ulcerated surfaces. The Allopathic school consider this the only means of relief, having one disease in the inner portion of the body to procure another on the outer ; so nature thus attacked by two contrary diseases will engender health, the one devouring the other.

It will be useless for us to observe from the facts already stated, that we consider, with every rational and enlightened mind, this strange and cruel process, scientific as it may be proclaimed to be by its advocates, an imposition ; a cruel and base delusion, destitute at once of reason and common sense, both in reference to the result of the means employed, and their application to suffering humanity under any form of disease. It is

therefore perfectly easy to learn our position in relation to the Allopathic School,—our position before the public,—the exposition of our theory, and the introduction of the nutritive principle,—which when understood discovers at once the line of demarcation between the two systems, and that they must remain at antipodes to each other, and exist in a decidedly antagonistical position. This is manifest from the commencement to the close of our argument in this work, in which an entirely new view is presented in relation to disease and its mode of treatment, which claims no affinity whatever to any other.

For the intelligence, honor, and dignity of the medical profession, as gentlemen in the community, we profess the highest respect, but when we come to principles and practice that have been carefully handed down to them, venerated for their antiquity of two thousand years, and sustained by the books derived from the dark ages, we are compelled to treat these gentlemen merely as receptacles of views and erroneous principles that have been actually made to their hands; and in embracing them they exercise a free moral agency, and become necessarily responsible to their fellows and to their God. All we claim, honestly, is to be allowed to exercise our mind in giving an exposition of our views, appealing to the enlightened judgment and experience of men to confirm and sustain our position, as the author of a new theory, based upon principles of chemical and physiological research and science, and brought within the sphere of sound principles and correct and salutary practice.

Even if we claimed, as allopaths do, that there is too much life, too much blood, too much muscle, too much strength, too much functional and physical energy, constituting diseased action, which is another false position in their idea of disease, and which is entirely erroneous, still our doctrine of the nutritive principle could not accord with their views, because they lessen the amount of life and vital force, and take away the blood, and thereby reduce the amount of flesh; because there is too much strength, they weaken and prostrate the body; because the functional and physical energies are too high, therefore depletion, reduction, and starvation are instituted. This treat-

ment may be alone considered consistent in the so-called scientific practice. Our principle, on the contrary, leads us in the directly opposite direction, which is exactly opposed to all this; to preserve the life, to save the blood, to increase the flesh, or displace that which is not healthy, to impart new vigor, to revive and cherish the functional and physical energies by nutriment alone, even while the system is laboring under disease, to soothe, heal, cool, cherish, revive, nourish, strengthen, and invigorate the body from the commencement to the close of treatment. This is our new-born theory—our nutritive doctrine, proposed for the relief of sinking and suffering humanity—a doctrine that is at all times susceptible of demonstration—a doctrine which cannot be refuted, because it is most amply sustained by the laws of nature and the ordinances of God, by which it is clothed with kindness, sympathy, and virtue—healing and soothing to body and mind, nutritive, cheering, and invigorating to each in the hour of sadness, sickness, and affliction.

This exposition, in reference to our medicines and nutritive fluids, is given for the express purpose of exhibiting to the invalid the absolute importance of our discovery, and at the same time to divest the mind of prejudice and misconception in relation to our mode of treatment, and its salutary results upon the human organism. It is our effort distinctively to define our position, which develops a system of practice entirely new—never before advanced to the world, either on this continent or that of Europe—susceptible of the most rational and satisfactory demonstration in its application to disease, in every condition of life, and in every climate. We simply state, for the satisfaction of those interested, that in the event of our nutritive fluids being continuously used, they must administer to the system the elements of pure blood, and so qualify the fluids in the circulating mediums of the system as to enable them to make pure and healthy deposits of substance, fluid, or other elements, to the several organs and organism, and eventually, by such a process, eradicate the most inveterate and deep-seated diseases in the human body, by changing the morbid for the healthy matter in the depository process; in fact, furnishing the system with such nutriment as will result in

healthful action in the organic structure, and withholding from the system such material as in the process of its conversion becomes too highly inflammatory, from the normal condition of the living body.

We would here state, that while the system is under disease, it asks for fluids to dilute its acid and putrescent combustion, and allay their virulence ; it asks for fluids to procure an action and induce perspiration from the whole porous surface ; it asks for fluids to increase the healthful discharge from the kidneys by urine, and at once dilute and reduce its irritable and glutinous properties ; the system calls for fluids to quench its internal fires, to satiate its thirst in the comparative dryness and glutinous state of the membranes and organs ; it asks for fluids, while under medication, to float off and detach from the coats of the stomach and bowels that thick gluten, and that bilious and morbid matter without which it could not be removed ; it asks for fluids to nourish and invigorate the body to sustain its vital energies, and to prevent it from consuming its own blood by starvation. We therefore consider our nutritive fluids of vast and momentous importance to every invalid who, under proper medication, may seek the absolute restoration of the comparatively exhausted energies of the human body, and once more to claim a relation to the healthy and vigorous of our race. Medicine, depletion, starvation, and bleeding, cannot form a single fibre. Nature's law, by nutritive elements, that which we term her physiological laws, alone can revive, resuscitate, invigorate, and restore the system to health and strength, and that, too, must, of necessity, be established upon the nutritive principle.

As this work is but an exposition of where we stand in relation to the various modes of treatment—how far we agree or disagree with others relative to the treatment of disease—the question would necessarily rise in the mind of all, what relation does your system sustain to the hydropathic treatment, or water-cure ? The principle on which this treatment is based is comparatively correct, so that we claim it as a worthy auxiliary to the promotion of health upon the nutritive principle. It acts as a restorative agent, and whenever it is judiciously employed, it is salutary and congenial to the organism. We

claim for it a nutritive action, considering the chemical properties of water, that the surface absorbs and takes up certain properties when freely and habitually used, which acts as a nutritive element to the nervo-electric circulation ; and in diseases of the nerves and spine, the treatment has proved itself to be both restorative and beneficial. The different temperatures and modes of its application require judgment at all times in its use.

It has a cleansing and cooling effect on the surface in removing the dead albuminous matter which almost invariably obstructs the nervous tissues and tubular cellular structure, and hinders the discharge of that immense amount of matter which, in the healthy body, must be expelled at each moment of time. It so opens the porous structure as to enable it to throw off this highly vitiated matter, and, at the same time, excites it to absorb the water itself with the oxygen and electrical currents from the atmosphere, whereby the expansive and contractile properties of the skin are brought into healthy action ; the result of which is, that the surface is enabled to perform its functional action in perfect accordance with the natural laws of the body. The application of water to the surface, while under disease, is never omitted in our practice. It is variously prepared, and adapted to the condition, temperature, and constitution of the patient, and it is easy of application. One of the leading and prominent features of the new theory is, the actual attention to the porous surface, in particular, superinducing an absorption of fluids on the surface, highly nutritive to the fluids of the circulating mediums of the whole organism, in the chemical relation they sustain to the diseased action of the system. Perhaps there has been no portion of the system that has been subjected to so much neglect, whose relative position in the organism is of such vast importance, in relation to the promotion of the health of the whole organism, as the surface. As a drink, it is invaluable. The purer the fluid in its native state, the cooler the crystal fountain, the more invigorating the draft ; but when impure, it at once becomes a prolific source of disease. Hence we claim it in its pure state, in its soothing, cooling, cleansing, toning, and *nutritive* action, as one of our auxiliaries in almost every state of

the system. Its application and use are at once salutary and congenial. Before all the luxuries of life take water from the crystal spring in its coolness and purity ; it is alike valued by all, in every climate ; and from its nutritive and chemical properties, it must harmonize with the natural laws of the human body both in sickness and in health.

Water is a nutritive element, attendant upon nature and all her laws of progressive growth in the vegetable and animal kingdoms, to the plant and herb of the field, to the tree in the development of its foliage and its fruits. It becomes the harbinger of life in her fluid physiology in coursing through the fibrous pores in all animated nature, to make her life-sustaining deposit ; to unfold the bud and the blossom, the foliage and the flower, the grain and the harvest ; finally, everything in the wide-spread domain of nature, is alike dependent upon it for its growth, animation, and vitality, as a nutritive element.

Water is alike congenial to the cattle on a thousand hills. They find it in the fountain, in the gliding stream upon the plain, and in the rippling brook ; they sip it in the sparkling dew-drops of the morn, when nature awakes from repose ; they receive it in the gentle showers, seasoning the perished herbage of the fields, cooling their coats of hair, softening their skins. They receive it with the muttering thunder's majestic roar, from nature's superlative shower-bath—the heavy showers and continued rains, at proper periods to wash and rouse and excite the animal surface, much of which is absorbed, to awaken its respiratory and evacuatary processes to revive and invigorate the whole body. It is an element ordained of God, to sustain life, and to impart vigor and strength to all animals—to the living beings that inhabit its transparent tides, whose flesh constitutes food most congenial to the sustenance of man. No one, we believe, will dispute its nutritive, invigorating, and life-sustaining properties. We cannot tell why it should not be congenial to man, as a nutritive restorant in sickness, and a comfort and blessing in health, intended and designed to be employed freely in the economy of the human structure.

Under the treatment proposed in our *entirely new* mode of practice, we give printed prescriptions and directions for bath-

ing, ashing, sponging, or showering, and the application of water in the several degrees of temperature indicated by the condition of the system; using the saline, alkaline, and sulphurine baths, hot, tepid and cold, applying it in various ways to the different parts of the diseased body. The hydropathic treatment, therefore, is to our new theory an auxiliary much to be desired, and we value it much for its nutritive, and soothing, and invigorating effects on the general nervous system, giving a universal tone to the whole organization. However, it does not possess those most desirable facilities of removing that deep-seated morbid matter, that from its age and inert properties, exerts a prostrating and deadly influence upon the whole organism. For the removal of such matter we resort to more effectual means.

The Homœopaths, and the Allopaths, are alike controlled, in their recognition of diseases, by constantly changing symptoms—by a hot or cold surface, a quick or a slow pulse—a fetid breath or coated tongue, varying from red to white or brown. At every change of these symptoms, a change of medicine is indicated; consequently, by both systems of practice, the effects and symptoms only are actually treated; the *cause* is not sought for. There is nothing, therefore, but a change of symptoms produced; which implies a change of treatment. So one change after another transpires, and the requisite medicine is given at each symptom; according to the Homœopaths, the smallest possible dose of the most deadly and dangerous poison; the more condensed the better—the smaller the particle administered the greater is the effect claimed, by which a cure is effected. Under this delusion they claim that, by this small particle, a disease is actually made in the body just precisely like the disease with which the patient is affected; and that little, *infinitesimal* dose, does actually engender a disease precisely like the one with which the system is affected, and which it is claimed to have the absolute power and authority to remove.

This vague notion is sustained by another *curative* motto, either to amuse or to delude the people, we cannot tell which; it is in this strange language: “*Similia similibus curantur.*” Here is another disease-procuring process to get rid of disease.

Two diseases precisely alike, the same as two well-matched horses, actually does up the work. When this miraele and mysterious phenomenon transpires in the human body, the wonderful eure is aecomplished : and all this was professed to be discovered by a M. Hahneman. Thus the Homœopaths procure disease on a smaller scale than the Allopaths : they are satisfied with two diseases that are precisely alike, and these engender health or cure. But the Allopaths require two diseases—the one precisely *contrary* to the other—on a somewhat larger scale of action. When they both exist in direct contrariety, they claim that the miraculous and wonderful phenomenon results in a cure. The latter disease, in the procurement and production of which the *doctors* have exhibited so much superlative skill, (notwithstanding the absolute contrariety of the indications of the two diseases,) must be large enough not only to develop itself fully, but actually to eat up and swallow down the former ; so that when they both get together, they perpetrate a eure—“*Curatio contrariorem per contraria*”—upon the same principle, we might suppose, as, that two falsehoods, contrary to each other, must make *truth* ; or, on the other hand, that two vices, precisely alike, must constitute *virtue*. These disease-procuring proecesses are said to purify the human system.

Now, those who live in full faith of this mysterious and seientifie delusion, profess to watch the two contrary diseases, and measure their progress in their two-fold contrary action in the same body, are entitled to the worthy designation of the “learned faulty ;” and those who can discern the preeise similarity of two diseases are termed also men of profound seience in this disease-making curative proecess.

In our new theory of the cause, treatment, palliation, cure and prevention of disease, we profess to have nothing whatever to do in developing or procuring disease ; but we propose the absolute removal of it, by engendering health and strength by nutritive elements ; by medication ; the use and application of water, in frequent ablutions of the body ; sustaining the nutritive principle by a nutritive proecess, natural, congenial and salutary to the development of the native energies and the vital and physical forces of the body. The principle is, that the

condition of health engendered from nutritive elements has, in and of itself, the properties of resisting, subduing and overcoming disease, and eradicating it, by the action and purity of the element furnished to the circulating mediums.

We furnish, also, to all invalids, a table of diet for food and nutrition, by which the natural laws of the system support, sustain and invigorate the whole organism, and surmount the influence of the depletive and wasting laws of disease. This table of diet or elements of food, presents a great variety of material, principally vegetable, from which a selection may be made, which in its properties is adapted to the exhausted or inflamed state of the digestive fluids of the system, or to the morbid or acute forms of the disease. We also give in detail those classes of substance or matter commonly used in health, which we consider injurious, exciting, and difficult of digestion, while the system is laboring under disease. Such articles of food are prohibited, from the fact that they contain but little nutriment congenial to the state of the organism, or that peculiar class of material, that the digestive fluids, in the condition in which they exist, do not possess sufficient functional powers to convert into such nutritive fluids as the system, under such circumstances, demands for the increase of its healthy action. These are designated and enumerated and are not to be used during medication, until the digestive fluids become sufficiently restored so as readily to be able to apply them in the progressive healthy action of the organism, regulated by the amount of exercise it is required to perform. The diet is by no means limited in quantity, but dictated and prescribed in abundance, of such material as will promote the healthful action of the body.

It will be readily perceived, that we can have no connection whatever with either the practice of the Allopathic or Homœopathic treatment, by the engendering or procuring one disease to eradicate or remove the other, and consequently have no use for the medicines selected with that intent, for we consider that there are diseases enough which exist and occur in the natural manner, without the reproduction of more, taxing and involving the vital powers and constitutional energies of the system with double the amount of exhaustion, in order to comply with the strange delusion of procuring disease in order to cure disease.

The view we have already presented of the two classes of matter existing under the two laws, that of Physiology and Chemistry—the one nutritive, sustaining the progressive organization of living matter in the normal condition of the body; the other anti-nutritive, developing and manifesting the action of decomposed and morbid matter and acids, putrefaction and disease—will doubtless satisfy almost any rational mind that we at all times have disease enough to contend with in the derangements of the system, without making a gratuitous effort to add a greater disease in order to consume the lesser, at the expense of the vital forces of the organism.

It remains now for us to announce to all persons who may desire to receive our prescriptions, and conform to the mode of treatment under our new theory and practice, that we make a careful investigation of the diseases of the body.

In order to ascertain the state of the system by the fluids of the circulating mediums, we examine by the pulse the number of beats per minute, by which we are enabled to perceive whether the fluids of those mediums exist in an excited or depressed state, and thereby discover the regular or irregular action of the heart. We also discover by gentle pressure of the circulating medium, the amount of vital force with which the fluids are propelled, denoting the comparative strength or weakness of the system, as the blood-vessels permeate the whole of the structure, and are connected alike with all the laboratories of the body. The volume of the fluids of the circulating mediums is also ascertained in the same manner, by which we learn whether the volume of blood is increased or diminished by the presence or absence of nutritive elements in the circulating mediums; whether it is above or below the normal standard of the healthy body, whether it exhibits an excited and full, or a depressed and low state of the system. All this is discernible in the several and diversified actions which the pulse assumes in the different diseases, as well as the changes produced in its action, as the different stages of each disease transpire in its progressive course of development.

We are thus enabled from long practice, and from the exercise of a discriminating judgment, to ascertain the character of the affection, the comparative diseased, depressed, or enfeebled

state of the organs and organism ; as the fluids have been long known to exhibit changes peculiar to the character of the disease with which the organs or body may be affected.

We are thus enabled to form a correct opinion in relation to the action of the nutritive principle in the circulating mediums of the body, whether they are making the normal deposits of nutritive elements, or whether the nutritive principle has ceased to carry out the depository process to the organs and organism.

Whatever may be the diseased state of the system, the equalization of its fluids in every part of the system is exhibited, the loss of that equal distribution of the fluids may also be readily ascertained. If they concentrate more to one part of the system, and retire partially from any other part, we are enabled to designate the parts affected by either of the above conditions, or by both of them, transpiring in the system at the same time. This knowledge is gained by the peculiar action of the pulse in the diseases in which such conditions are indicated.

By such examinations we are enabled to ascertain, with surprising correctness, which may at any time be tested, the state of disease under which the system is laboring. Opinions are formed, and diseases, obstructions, and weaknesses are detected, explained, and elucidated, so as to convince even the most skeptical of their correctness, tracing them to their several localities in the different parts of the complicated structure.

The examination, also, of the porous surface, which is frequently found to be comparatively obstructed and closed, its tubular and cellular structure confined, harsh and inactive, with but slight exudation either of lubricating fluids or waste and morbid matter or carbonic acid, the consideration of these several conditions of the surface proves to be very important in examining the general state of the health, for the habitual neglect of the skin has proved to be a great source of disease in every condition in life, and in every climate.

We examine carefully with a magnifying glass the character and condition of the mucous, furred coating of the tongue, and the various and diversified degrees of morbid and inflammatory action which it exhibits ; for these are indicative at all times of the condition and peculiar state of the whole alimentary canal, and the laboratories connected with it in their gland-

ular and mucous coats, as well as the character of the diseases with which they are affected, or the torpor which suspends their functional energy. The tongue also exhibits the humory or scrofulous, congestive, or dyspeptical state of the fluids of the circulation, and alike refers to the locality of such inflammatory or depletory action in any part of the system, which enables us to draw conclusions of the state of the mucous membranes generally, which we defy any invalid to contradict, from the fact that their truth is confirmed by the knowledge the patient possesses of his own sensitive condition and feelings.

When we refer to that higher state of organized matter and fluids contained in the brain of the whole head, from which emanate the voluntary, as well as involuntary motor power and forces, the functional energies and physical strength, and, in fact, the sensitive state of the whole nerves and spine, which is termed the *nervo-electric* circulation, we remark that it frequently becomes excited on account of the absence of that pure, delicate, and tender nutriment which it requires for its normal development. To ascertain the state of this circulation, and especially of the fluids of the brain and spine, we place our hand upon different portions of the head, and thereby readily discover the increased heat of the fluids of the brain necessarily involving a prostration or excitement of the nervous circulation. The brain being the laboratory in which is generated the vital energies of the whole structure, presents a varied and diversified condition of temperature, indicative of a number of diseases which are more particularly connected with the nervous circulation, and are more or less affected by the various diseases of the system generally.

It becomes necessary, in some instances, to examine the condition of the spinal column, and also the chest and other significant parts of the body, in order to ascertain the precise condition and health of the body.

We do not hesitate to state that we will make, when required so to do professionally, a very correct description of the condition of all the organs and organism, connected as they may be with disease, obstructions or debility, either of a recent or chronic form, without obtaining any information from the patient whatever. Such is the character of the science of a fluid

physiology, as to enable us to decide minutely and critically in relation to the character and locality of disease in the human body, to the entire satisfaction of the party interested. Without this knowledge being first clearly and distinctly ascertained, to prescribe would be inconsistent.

Before a prescription can be given, it becomes also absolutely necessary to learn the cause of disease, and to call to our aid all the information that can be elicited, in order clearly to learn and actually to understand, how far the disease-procuring medicines and ulcer-begetting mercurials, or the savage blood-cup, or deadly lancet, or the scalding blister, has prostrated the organism ; for it is by no means unusual to find such wrecks of humanity deploring the madness of a false science, and suffering under the effects of this deadly and delusive treatment. Thousands of beings are found half-poisoned, half-destroyed, half-deranged, from the deadly effects of highly-concentrated poisonous medicine, lingering in constant fears from the effects of this disease-engendering process, the nervous system exceedingly sensitive, and shattered with neuralgic pains torturing the body, arising from this disease-procuring practice.

Our treatment in such cases will purify the blood, and eradicate the vitiated and poisonous medicines which frequently remain imbedded in mucus, like a slow fire, kindling, at every change of the atmosphere, into pangs of misery and distress. We have been in the habit of removing such impurities, which are detected in the fetor of breath and perspirations, from the system, with the utmost success, as cases daily are being presented whose disease has been procured purposely in attempts at *scientific* effects, falsely called *cure*.

Before we prescribe, we form conclusions in our examinations as satisfactory to the person seeking a knowledge of his disease, as they can be.

We profess, most sincerely and truly, a clear and distinct knowledge of the causes of disease ; not only so, but we profess to detect and describe, in the person of any invalid, his disease, whether they exist in ulcers, dyspepsia, or any other form, and we openly defy any person to escape in our examinations, to whom we will not give a satisfactory account of his condition, whether it exists in general dilapidation, exhaustion from

too much labor, or from the effects of the loss of blood, or, in fact, from past or recent disease, or from poisonous treatment, or from any other cause ; we use this strong language from the very fact that long experience, and the constant practice of examining and detecting the peculiar developments, through the fluids of the human body, under the laws of a fluid physiology, leads us to a confirmation of what we have stated. If we do not convince the inquirer of our ability, and of the actual knowledge of his body, with all its complicated infirmities, without practicing any delusion, or disposition to deceive, we do not wish any person whatever to place any confidence in what we affirm, nor do we ask the patronage of any invalid.

In making such examinations, if the patient desire it, we can give a minute description of the organic, muscular, or nervous portions of the body, as well as the humory condition of the fluids of the circulating mediums, so as clearly and correctly to trace to its source or origin in the body ; for, the derangement of the state of the fluids, in one of the laboratories of the system, necessarily engenders disease and debility in another, so that no part or organ of the body can be affected without absolutely involving the whole system ; for the circulating mediums, both those connected with the heart and the brain also, partake more or less of the diseased action, as they are severally connected with each organ and with every part, and necessarily with the disease. So that our new mode of detecting diseases, debility, humors, and nervous weakness in the system, resides in the accuracy of science, a fluid physiology, and the chemical properties of the blood ; this we venture to do in all cases correctly, without deriving information from the patient under examination. Or, in the event of any person wishing to correspond with us by letter, informing us of the positive leading disease, and the character and state of the organs affected, we could readily trace the connection of that disease with the origin and cause, or, from its locality, ascertain its action as a result on the fluids of the circulating mediums, measuring correctly the relation they sustain to each other. If the disease cannot be distinctly traced in its relation to the whole structure, and it cannot be clearly and satisfactorily ascertained, we should not venture

to prescribe; but we think we can satisfy almost every person in relation to a matter of such great importance.

It is one of our fixed principles not to prescribe for any person while a doubt exists in relation to the cause of disease.

We furnish a printed prescription, giving in detail the times of taking the medicines, with a table of diet, describing distinctly such food and fluids as may be considered injurious, and such food and fluids as may be considered congenial and nutritive to the then condition of the system. These are presented in great variety, and are to be used during medication; with other useful information.

We furnish printed directions for washing the body; and in paying especial attention to the condition and health of the porous surface, we make references to such parts of the body and limbs, spine and head, &c., as necessarily require our special instruction, with other information which the state of the case may indicate, in the use of the simple or medicated, the alkaline or saline baths, or the use of the sponge, towel, hip-bath, or any other necessary or requisite application of water, including the shower, or the warm or cold, tepid or vapor baths, either medicated or simple.

The treatment, palliation, and cure of disease, has triumphed more under the nutritive fluids, invigorating and giving energy to the physiological laws of the organism, than any mode of treatment yet known, adapting the aliment to the weak state of the digestive organs, in a fluid state, so as to be distributed by the circulating mediums to every part of the organism, and especially to that part the peculiar weakness of which requires it.

In neuralgia, nervous, rheumatic affections, and pains of the head, back, and joints, the nutritive fluids have had an extraordinary and beneficial effect, changing, in fact, the juices of the flesh from an irritable to a mild form, and resulting in promoting and securing strength and quiet sleep. In the regulation of the nervous system, in particular, we find the fluids of great value. We prescribe various simple applications to parts affected, more especially to the small of the back and kidneys, perfectly within the reach of the patient's means, requiring only a correct knowledge of the mode of application, as well as to the limbs and other parts, as they are indicated

by the condition of the patient. The strength and support they afford, cooling and bracing the part, is very salutary. We furnish, also, recipes of our nutritive fluids—how they are to be prepared—when, and how often to be taken. Simple and nourishing as they will prove to be when used, any person can prepare and use them in any quantity with, as we have already stated, but little expense.

We also furnish to those who desire our advice and treatment, in restoring their health, recipes, in many instances, for restorative and strengthening cordials, purely vegetable—namely :—The Female Restorative Compound Cordial, not unpleasant to use, for palpitation of the heart and other weaknesses ; the Pulmonary Tonic Compound Cordial, for the lungs and throat ; the Alterative, Vital and Antispasmodic Syrup ; the Anti-Scrofula Compound Cordial ; the Anti-Bilious and Restorative Cordial, the Anti-Dyspeptic Compound Cordial, and a variety of recipes adapted to the different characters of disease, and the different stages which they have assumed by neglect or bad management. We place the recipe at the disposal of the patient to make and prepare any quantity as it is needed, and to be renewed as circumstances require. These are given with the other prescriptions, to be used after the system is prepared by other treatment, to prevent the system, in all cases, from relapsing into its former disease. They are not nauseous, but agreeable to the palate. They assist in giving tone to the digestive fluids, and can be used and made without any inconvenience. Finally, our whole effort will be to enlighten and instruct the patient, under all circumstances, to preserve and prolong life, to nourish and revive the body, to arrest the progress of disease and decay by nature's own laws, and to avoid, if possible, the depletive, starving, and drugging process.

We require of the invalids to be faithful to themselves in following the directions of diet and food, of washing and cleansing the surface, in the faithful use of the nutritive fluids, and in using also our restorative medicines and cordials at the times and for the periods required. Finally, to make one continued and salutary effort to save the weakened and dilapidated system from premature death.

In cases of dyspepsia, and consumption, and affections of the liver, nervous excitement with extreme pressure and heat in the head, shortness of breath in taking exercise, palpitation of the heart, weakness of the back, and, in some instances, a kind of partial insanity from general nervous debility, we have succeeded remarkably well, and our cures have been highly satisfactory and permanent on the nutritive principle. A few testimonials will probably be satisfactory to some, which we take from the Cincinnati Gazette and Washington Telegraph :

O. S. FOWLER AND DR. A. G. HALL.

The Nutritive Principle.—It will be remembered that during the time he lectured in this city, being very feeble in health, he placed himself under the medical treatment of Dr. A. G. Hall, the gentleman who gave two courses of lectures in this city on this *new principle*. Then Mr. Fowler stated to his audience that he had increased in weight, from the use of *nutritive fluids*, four pounds in six days. Since which time he has continued the prescription. About the time he left the city for the East, the Doctor promised him ten pounds' increase in the next two weeks. The following letter will confirm the fact :

PITTSBURG, April 16, 1851.

FRIEND HALL—You have put on me the ten pounds of meat you promised, and that in the midst of my usual extremity of professional labor. In addition to this, you have removed that intense pain in my forehead, consequent on excessive intellectual exertion, and I am very much stronger and better, and more able to work, as I am heavier; and I attribute the favorable change to yourself, for in other respects my habits have been as before. Your nutritive *fluid* I regard as of great value, and your saleratus and prescription is just the thing. Why physicians oppose the use of alkalies I never could imagine. My own experience and observation sanction their use. Go on in your good work of building up broken-down constitutions.

Yours, for good bodies,

O. S. FOWLER.

Dr. A. G. HALL, Cincinnati.

MORE YET.—I have also placed myself under the treatment of Dr. A. G. Hall for dyspepsia. I have been taking freely of his medicines, and making and drinking freely of his nutritive fluid during the last nineteen days. I have increased rapidly in weight. I have been carefully weighed: I am thirteen pounds heavier than I was nineteen days ago, when I commenced, and much stronger in every respect.

W. A. LAYTON,

Corner of 5th and Home streets, Cincinnati.

Cincinnati, April 25, 1851.

Dr. A. G. HALL has been constantly occupied in writing prescriptions since his lectures, and his numerous patients are gaining in weight, strength and confidence. Call on him: he may possibly give you returning health.

MORE YET.—The undersigned, citizens of Germantown and vicinity, take much pleasure in stating that we have taken prescriptions from Dr. A. G. HALL, and that his new mode of treating chronic diseases, with his nutritive fluid, proved to be salutary and highly satisfactory to us. We therefore recommend with confidence the adoption of his prescriptions and mode of treatment to invalids affected with chronic complaints and general debility, as we have increased in weight and strength during medication. The results of his treatment also with

us, in the derangements of the female constitution, have been alike gratifying and eminently successful, and render him worthy of all confidence.

H. D. FISK, for wife and sister.

V. O. PINKARD, for sister.

R. P. DUNNETT, for wife.

RICHARD LLOYD, for self, wife and son.

JOHN H. WALTON, for Mrs. Kirtley.

JOHN L. TABB, for wife.

JOHN REID, for self and wife.

BENJ. C. HOLLIS, for two daughters.

Germantown, Sept 20, 1850.

DOVER, MASON COUNTY, KENTUCKY, Oct. 3, 1850.

We, the citizens of Dover and its vicinity, would state that we have taken and followed out the medical prescriptions given to us by Dr. A. G. HALL, and that we are fully satisfied that the results of his treatment are highly salutary and beneficial, as we have gained much in weight and strength during medication. With some degree of confidence acquired by actual experience, we recommend his prescriptions and nutritive fluid to all invalids of weakly constitutions and impaired health.

Also his treatment in the derangements of the female constitution has proved remarkably safe, and eminently successful with us, and renders him worthy of confidence.

JOHN C. BAGLY, (for wife,)

AARON PORTER,

E. GENNINGS,

JOHN E. FRENCH.

I take pleasure in subscribing to the above, as I have taken a prescription myself, one also for my wife, and each of my two children, and for her sister; also for two black female servants, who have been diseased for five or six years, who are absolutely to all appearance well at present. We have all gained in weight and strength by his fluids.

LANGHORN TABB.

Doctor ALFRED G. HALL has had a number of persons under treatment in the city of Washington since he lectured on the nutritive principle, who can confirm the value of his nutritive fluids, if necessary.

In affections of the lungs, throat, and bronchial tubes, as well as those peculiar cases of the derangements and weakness of the female organs, the nutritive fluid have proved satisfactory, as well as in almost every disease of the organism; for our very treatment is to invigorate the fluids of the whole body, and virtually to change the chemical properties of the blood and the fluids of all the circulating mediums. We add more testimonials:

WASHINGTON CITY, May 11th, 1852.

DOCTOR A. G. HALL.

Dear Sir :—Having suffered for a long time with general debility, and other ills usually attendant upon Dyspepsia, I was induced to attend your Lectures, and finally to place myself under your treatment. The result is, that I find my general health much improved, and I am fully satisfied that your mode of treatment *must be* beneficial to all who will thoroughly carry it out.

I am very truly yours,

W. L. WALLER.

WASHINGTON CITY, D. C., April 12th, 1852.

DOCTOR A. G. HALL.

Dear Sir :—I state with the utmost satisfaction that my health is entirely restored, from the fact that I have gained in weight and strength. For the last five years my health has been much impaired ; general debility, spinal irritation, and weakness reduced me very low in flesh. Since I was directed to apply to you and use your prescriptions, and medicines, with the nutritive fluids, I have become very strong, in my general health, and the weakness, and pain, from my back and loins, are entirely removed. I have gained in the last six weeks 18lbs. in weight, after applying and receiving treatment from other physicians without any relief, but rather an increase of pain and weakness. I am satisfied that I am recovered under the nutritives of your restorative treatment, and hopes I shall continue to be grateful for the change.

I am, sir, very respectfully, &c.,

MARY A. EATON.

WASHINGTON CITY, D. C., April 12th, 1852.

DOCTOR A. G. HALL.

Dear Sir :—Having become an invalid for over two years with dyspepsia, spinal irritation, and neuralgia, my nervous system became exceedingly excitable, other weaknesses were engendered, which prostrated all my energies, with hemorrhage from the stomach, which confined me to my room. In this condition I was left without hope by my Physician, who directed me to seek relief from some other source, at which time I applied to you, placed myself under your prescriptions and treatment, with your Nutritive fluids and medicines. It gives me much pleasure to state, that I commenced to improve during the first week, my rest returned, my system became quiet, I continued to gain in weight and strength since the 14th March last, and I am now perfectly restored to health, and feel assured that my strict attention to your directions, &c., has proved highly salutary. And my nerves and strength are both confirmed. I remain with the highest personal regard and respect, yours, &c.,

G. W. HARRY.

WASHINGTON CITY, D. C., April 12th, 1852.

DOCTOR A. G. HALL.

Sir :—I am much gratified at the result of your treatment in relation to my daughter, eight years of age, who has been severely affected with spasms and fits, from the age of fifteen months. After employing a number of Physicians, I was candidly informed that it must produce idiocy—but received no relief from them whatever. The fits became more and more severe, and lasted a longer period, imbecility of mind was strongly marked, with loss of memory. I feel, sir, truly thankful in being enabled to state, that, when I placed her under your treatment, and prescriptions, and nutritive fluids, that the fits immediately subsided, and her memory and mind is restored. At the usual time of the moon, when the fits had previously been dreadfully severe, at such times she seems yet to be slightly affected, but without either spasms or fits, and as I am still following your treatment, I have no doubt of her permanent recovery, the cause of which you so carefully explained and removed. I remain, sir, with confidence and esteem, yours, &c., &c.

MARY A. EATON.

WASHINGTON CITY, D. C., April 5, 1852.

DOCTOR A. G. HALL:

In as far as it may furnish an item of commendation for your system of medical practice, it is certainly very agreeable to my own feelings to state, in this manner, that you have recently closed a most successful and gratifying course of treatment of a case of typhoid fever in the person of my son William, of the age of nineteen. Two weeks after his attack, fever and delirium, with

many of the worst symptoms of the disease, having prevailed for one week, and having been subjected, in the most reputable professional hands, to the ordinary but ineffectual mercurial treatment for another week; the fever having, at last, assumed a malignant type, so far that the prostrated energies of my son would sometimes give way to another type of delirium, presenting symptoms of imbecility; at this stage of the disease, you were called in, and the potency of your nutritive treatment was most manifest. My son was continued under your medical direction for about three weeks. During this period he was subsisted wholly upon your nutritive fluid, No. 1, consuming from two quarts to a gallon and a half every twenty-four hours. Two days from the time of the last alterative exhibition, he was so far recovered from the condition of helplessness, as to be able to walk several squares—the distance from my room to my boarding-place; and this he did with advantage, even before he was perfectly restored to the spirit of a sound mind.

With unqualified commendations of your prescription and practice, and with the highest personal regards,

I remain,

A. E. DRAPIER.

DOCTOR A. G. HALL:

I intended to have called upon you this morning, but as the weather is disagreeable, I deem it prudent not to turn out; and in lieu of my call, I send you this note, respectfully requesting you to answer through the Post Office. I am frank to confess, I did not entertain a high regard for your professional skill previous to my calling upon you; but, sir, the conversation I had with you convinced me that you are no mountebank, but a scientific and honest practitioner. I will now say to you, that I am a physician, a graduate of the Allopathic school, as my diploma will attest. I concealed the fact from you on yesterday, in order to see if you would attempt to bamboozle me in any way. I am truly happy to say that you did not. On the contrary, your communications were frank, truthful, and scientific, exhibiting much original thought, the result of assiduous application to your profession. I now, sir, esteem you a gentleman of the purest caste, and a physician of no common order. I say this from my personal knowledge; before I formed your acquaintance, I could not.

I now have a proposition to submit; cogitate upon it, and respond, letting me know the result of your deliberations. I wish to place myself under your treatment. I will abide your directions in all things. Should my health be restored, I will then pay you the \$25, yea \$50. This I *pledge you my honor as a gentleman and physician* to fulfill to the letter. I shall remain in Cincinnati about one month; if, at the end of that time, my health improves, as you anticipate, I will hand you the money. Independent of the pecuniary reward from me, I will make myself of the greatest service to you, by proclaiming your fame in *Gath*, and publishing it in *Askelon*.

Should my health be restored through your agency, I shall ever rejoice in having met you. I am, sir, yours with the highest respect and consideration,

ALEXANDER ROBERTS.

Cincinnati.

In cholera morbus, Asiatic cholera, in all diarrhœas, relax and weak state of the bowels, bloody fluxes, relaxes, and chronic dysentery, and finally all inflammations and affections of the stomach, bowels, mesenteric glands and kidneys, the nutritive fluids, in frequent drinks, have a most remarkable and extraordinary cooling, healing, soothing, nutritive, and curative action—triumphant, indeed, in every case, when freely administered.

POSITIONS AND DOCTRINES OF THE NEW THEORY.

1. THAT the human body exists under a natural law of physical development, sustained by a nutritive element, under the action of a nutritive principle.

2. That the natural law divides itself into two distinct laws, which are constantly present with the system—the physiological and chemical laws.

3. That the physiological law sustains its relation to the nutritive principle in the preparation, digestion, and adaptation of nutritive elements, as food for the growth, organization, and development of the animal body, with its temperature, and all its sensitive and functional, its physical and vital forces.

4. That the chemical law sustains its relation to the living body, by dissolving its fibres and fluids, as they expire into acid and putrescent matter, and sustains the evaculatory processes from all the outlets of the body in the normal state, and in the production of chemical combustion, fever, disease, and natural death.

5. That there are two distinct and general classes of matter, which are attendant constantly upon the two laws; that the one class is derived from substance and fluid received as food, converted into fluid to sustain the organization, and replenishes the points of its constant decay with living organized matter, endowed with a living normal temperature.

6. That the other class is derived from the exhausting fibres and dying tissues and fluids, the waste and worn-out matter, and all substance and fluid in the body that has no nutritive properties, arising from the wear of the parts, and such matter as cannot be used in the organization, and becomes acid, putrescent, and offensive to the health of the living body, and is constantly being expelled at all the outlets of the body as evaculatory and poisonous matter.

7. That the law of waste and replenishment is sustained by the two classes of matter: the one existing as nutritive fluids, under the nutritive principle and physiological law, making her deposits of substance and temperature; and the other

dissolving the tissues into acids, and decomposing the waste and exhausted material, under chemical law, effecting the escape of its poisonous gases and substance from the several outlets of the body, making room for the deposits.

8. That the two general classes of matter, the two laws and the processes of waste and replenishment, exist and are constantly transpiring, at the same time, and in the same body, and at each moment of time, existing as a natural universal law of the organism.

9. That the physiological law sustains life by substance and combustion, by alkaline and electrical fluids, and assists disease by the law of diffusion and expulsion.

10. That the chemical law engenders acids from decomposition, and increases the temperature of putrescent matter; retains it within the body; procures disease, dilapidation, and natural death.

11. That the body is an arrangement of cellular, tubular, membranous, and tissular structure, comprising the arrangement of all its parts; that without the fluids it would be inert, and entirely destitute of motion; that it is permeated by circulating mediums, charged with living fluids, of compound chemical properties; that in the fluids alone resides the sensitive virtue, functional energy, and motive and physical forces of the whole of its complicated machinery, illustrative of the science of fluid physiology.

12. That the fluids exist in two general circulating mediums, and they permeate every part of the organic structure and the organs, and may be considered as distributing and returning mediums to and from every part of the body, and its several laboratories.

13. That they may be divided into two classes, namely, the general nervo-circulation, and the general carbonized circulation; that they are distinct within the body, but interwoven with each other in every part of the organization, to carry out the wonderful economy of the laws of vitalization and force.

14. That the general nervo-circulation in its mediums is divided into the nervo-electric circulatory mediums, and the nervo-magnetic circulating mediums; that they act with the fluids of the brain, spine, and nerves, in transmitting to the

brain electrical currents from all the surfaces, and all parts of the organs and organism, and distributing magnetical currents from the brain, through the mediums, constituting a returning and distributing circulation.

15. That the fluids of general carbonized circulation is divided into five or more circulating mediums, containing all the chemical properties of the blood, in their several actions, and in the different relations they stand to the organism and its several laboratories, representing also a distributing and returning circulating mediums, to and from all parts of the organs and organism.

16. That the fluids of the general carbonized circulation present, 1st, An ignitable carbonic circulation, the mediums being the absorbent vessels of the alimentary canal, transmitting nutriment through the mesentery and thoracic duct, terminating at its junction with the other circulating mediums, just as they unite to enter the heart, containing the alkalies.

17. That the fluids of the general carbonized circulation present, 2dly, The lungular circulation, its mediums, going out from, and returning to the heart, by a returning and distributing circulating medium in the substance of the lungs to and from the air-cells.

18. That the fluids of the general carbonized circulation present, 3dly, The nutro-combustive circulation, its mediums being a distributive circulation from the heart, terminating in all parts of the organism, making nutritive and combustive deposits, and sustaining the alkalies.

19. That the fluids of the general carbonized circulation present, 4thly, The latent carbonized circulation, by its mediums, being a returning circulation from all parts of the body to the heart, containing sulphur, latent carbon, iron, hydrogen, and the alkalies, connecting with *ignitable carbon* at the angle where the thoracic duct enters its circulating mediums.

20. That the fluids of the general carbonized circulation present, 5th, A latent sulphureted circulation, being a returning circulation, by its mediums, to the laboratory where the bile is set free.

21. That the whole surface is an absorbing and exhaling surface, being formed of tubes and cells ; that it is virtually a

breathing surface, and the same changes are produced in its tubular and cellular structure as that which is produced in the lungs, and that the surface receives nutriment from the atmosphere, of light, heat, electrical currents, and oxygen, generating a vital combustion in all its cells and nervous tissues.

22. That there is an alkaline circulation in the circulating mediums, and that these dissolved alkalies is to the whole body a preservative and neutralizant, a solvent and detergent in its action, that it is distributed in the circulating mediums to every part of the organism, meeting the dissolving tissues as they change into acids in the decomposing process, and generating by the union of alkalies and acids, electrical currents, to vitalize deposits, and that it sustains the nutritive principle.

23. That there are electrical currents received by the nerves in the whole porous surface of the body, and also from the nervous surface of the air-cells, and tubular structure of the lungs, that electrical currents are inhaled alike by both surfaces, connected with the nervo-electric circulation, and that the vitalizing processes are progressively sustained by this fluid.

24. That light, the heat of the sun, oxygen, and electricity, sustain the nutritive principle in the body, by these nutritive, combusive, and vitalizing elements, that they exist on the surface and throughout the circulating mediums, equalizing the temperature and vitality of every atom in the depository process, in its constant and general organization.

25. That the gastric juice, bile, and pancreatic fluid, as digestive fluids, exist everywhere in the circulating mediums, and aid in separating and adapting to each organ and every part, the property and quantity of substance, fluid, or temperature it may require, and that the processes of deposit are aided by their virtues.

26. That the temperature of the body is maintained by oxygen, carbon, and electrical currents, alkalies, and hydrogen, and that heat is being evolved as they become ignitable in every possible part of the organization, at the same moment of time equalizing the circulation.

27. That nature's universal law is nutrition—it is her gen-

erating and replenishing process in the great field of living animal and vegetable organisms, and even in disease she lends her soothing, healing balm in assuaging pain, in cooling the fevered and restless body, and in administering that mild and latent nutriment that quiets the weakened, dilapidated and heated nervous fluid ; finally, it clothes nature in her truest garb of loveliness, life and vigor, and is the only thing of which it can be said that it actually triumphs over disease ; for without it, all nature must expire.

